

GLADSTONE VILLAGE

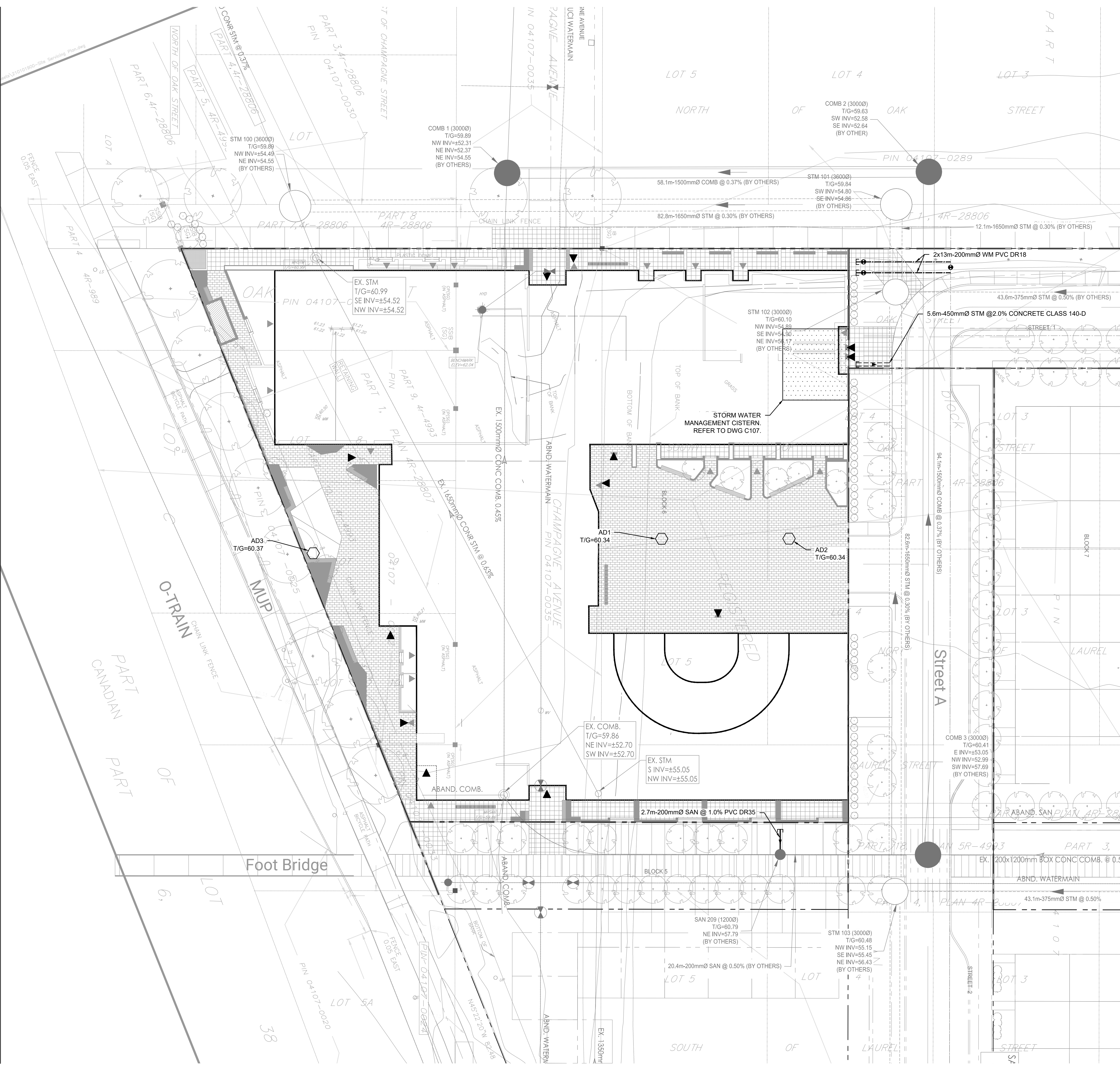
933 GLADSTONE AVENUE



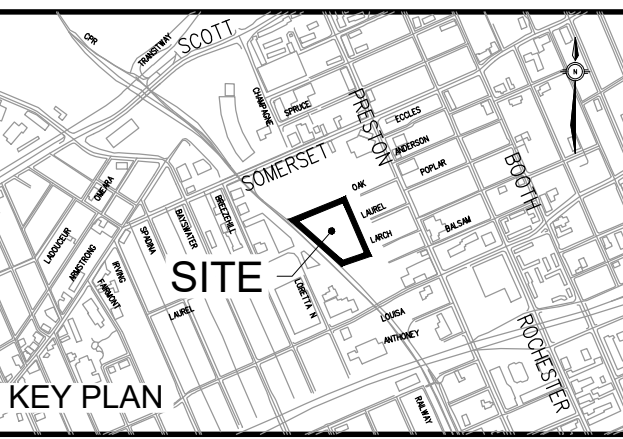
MORRISON HERSHFIELD

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- NOTES:
GENERAL
- COORDINATES ARE IN MTM ZONE 9 (76°30' WEST LONGITUDE) NAD-83 (ORIGINAL)
 - SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING. CONTRACTOR TO VERIFY ALL EXISTING UTILITY ELEVATIONS AT CONNECTION AND CROSSING LOCATIONS PRIOR TO CONSTRUCTION AND ADVISE THE ENGINEER OF ANY DISCREPANCIES.
 - UNLESS DIRECTED OTHERWISE ANY DAMAGED ASPHALT OR CURB (REGARDLESS OF WHETHER WITHIN OR EXTERNAL TO THE SITE) SHALL BE REINSTATED IN ACCORDANCE WITH CITY STD. DET. R10 AND S1.
 - UNLESS DIRECTED OTHERWISE THE CONTRACTOR SHALL REINSTATE ALL SIGNS, LIGHTING AND OTHER STREET FURNITURE DISTURBED BY THE WORK.
 - THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT TRAFFIC MANAGEMENT PLANS FOR WORK IN RIGHT OF WAY IN ACCORDANCE WITH OTM BOOK 7.
 - CLAY SEALS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DETAIL S9 AND SHALL BE INSTALLED AT 50m INTERVALS IN ALL PIPE TRENCHES. CLAY SEAL TO EXTEND FULL TRENCH WIDTH AND FROM BOTTOM OF TRENCH EXCAVATION TO UNDERSIDE OF ROAD STRUCTURE, WITH A MINIMUM THICKNESS OF 1m ALONG PIPE.
 - THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY SERVICING NEEDED, AND SHALL ALSO COORDINATE WITH OTHER TRADES AS NECESSARY. TOPOGRAPHICAL SURVEY PREPARED BY STANTEC DATED DEC 21, 2021.
- SEWERS
- ALL STORM SEWERS, SANITARY SEWERS AND CATCH BASINS LEADS SHALL BE PVC DR 35 UNLESS OTHERWISE SPECIFIED.
 - REFER TO DETAIL 1 ON DRAWING C004 FOR SEWER INSTALLATION.
 - CONTRACTOR SHALL MAINTAIN EXISTING SEWER FLOWS DURING CONSTRUCTION IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS.
 - ALL MAINTENANCE HOLES, CATCHBASINS AND AREA DRAINS SHALL BE ADJUSTED TO POST-CONSTRUCTION GRADE.
 - LEAKAGE TEST (SANITARY SEWER ONLY) AND CCTV INSPECTION SHALL BE COMPLETED AS PER CITY OF OTTAWA SPECIFICATIONS PRIOR TO THE INSTALLATION OF BASE COURSE ASPHALT.
- WATERMAINS
- REFER TO DETAIL 2 ON DRAWING C003 FOR WATERMAIN INSTALLATION.
 - ALL WATERMAIN MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE 2017 EDITION OF THE CITY OF OTTAWA STANDARD SPECIFICATIONS AND STANDARD DRAWINGS. PVC PIPE TO BE CLASS 150 DR18 TO LATEST EDITION OF A.W.W.A. SPECIFICATION C900 AND CSA B137.3 LATEST AMENDMENT WITH GASKETED BELL AND SPOT COUPLINGS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A WATER PERMIT AS REQUIRED FROM THE CITY OF OTTAWA, AND COMPLYING WITH ALL CITY OF OTTAWA REQUIREMENTS. THE CITY MAY REQUIRE THAT CERTAIN ACTIVITIES (E.G. VALVE OPERATION, CONNECTION OF NEW WATER SERVICE TO EXISTING WATERMAIN, DISINFECTION) BE CARRIED OUT ONLY BY CITY FORCES.
 - ALL VALVES 300mm DIAMETER AND SMALLER SHALL INCLUDE A VALVE BOX AS PER W24.
 - THE NEW WATERMAIN IS TO BE INSTALLED WITH A MINIMUM OF 2.4m COVER (INCLUDING HYDRANT LEAD), WHERE 2.4m COVER IS NOT POSSIBLE. PROVIDE INSULATION IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DETAILS W22 & W23.
 - THRUST RESTRAINT SHALL BE PROVIDED BY BOTH RESTRAINING/RETAINING RINGS AND THRUST BLOCKS AT ALL DEAD END CAPS, PLUGS, VALVES, BENDS AND REDUCERS AS PER CITY OF OTTAWA STANDARD DETAILS W25.3, W25.4, W25.5 AND W25.6. ALL TEMPORARY THRUST RESTRAINTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
 - TRACER WIRE SHALL BE PROVIDED FOR ALL NEW PVC WATERMAINS IN ACCORDANCE WITH THE SPECIFICATIONS AND CITY OF OTTAWA STANDARD DETAIL W36.
 - CATHODIC PROTECTION SHALL BE PROVIDED FOR ALL NEW WATERMAINS IN ACCORDANCE WITH THE SPECIFICATIONS AND CITY OF OTTAWA STANDARD DETAILS W39, W40, W41, W42 AND W47. CATHODIC PROTECTION OF EXISTING WATERMAINS SHALL ALSO BE PROVIDED AT CONNECTIONS BETWEEN EXISTING AND NEW WATERMAINS.
 - ADJUST ALL VALVE CHAMBERS, VALVE BOXES AND HYDRANTS TO FINISHED GRADE.
 - WATERMAIN SHUTDOWNS SHALL BE SCHEDULED A MINIMUM OF 72 HOURS IN ADVANCE.
- UTILITY NOTE
- THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR SUPPORTING AND PROTECTING ANY EXISTING UTILITIES, AS REQUIRED, IN ACCORDANCE WITH THE UTILITY OWNERS' REQUIREMENTS. CONTRACTOR IS REQUIRED TO OBTAIN LOCATES, IN ADVANCE OF EXCAVATION WORK, AND FORWARD COPIES OF THE LOCATES TO THE CONSULTANT AND THE OWNER PRIOR TO EXCAVATION.
 - ALL CROSSING OF EX. UTILITIES TO BE IN ACCORDANCE WITH CITY STD. DET. S10

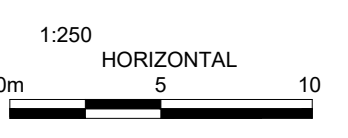


ISSUED

No.	Date	Description
1	2021 AUG 03	ISSUED FOR 100% SD
2	2021 SEP 08	ISSUED FOR SITE PLAN APPROVAL

LEGEND

- NEW AREA DRAIN (REFER TO MECHANICAL FOR CONTINUATION)
- NEW STORM SEWER
- NEW SANITARY SEWER
- NEW WATERMAIN
- NEW WATER VALVE AND VALVE BOX (W24)
- EXISTING STORM MAN-HOLE BY OTHERS
- EXISTING SANITARY MAN-HOLE BY OTHERS
- EXISTING STORM SEWER BY OTHERS
- EXISTING SANITARY SEWER BY OTHERS
- EXISTING WATERMAIN BY OTHERS
- NEW ENTRANCE
- STORMWATER MANAGEMENT CISTERN

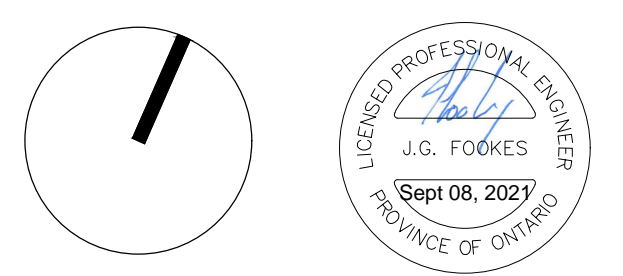


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Project No: 210101900
Date: 08/09/21

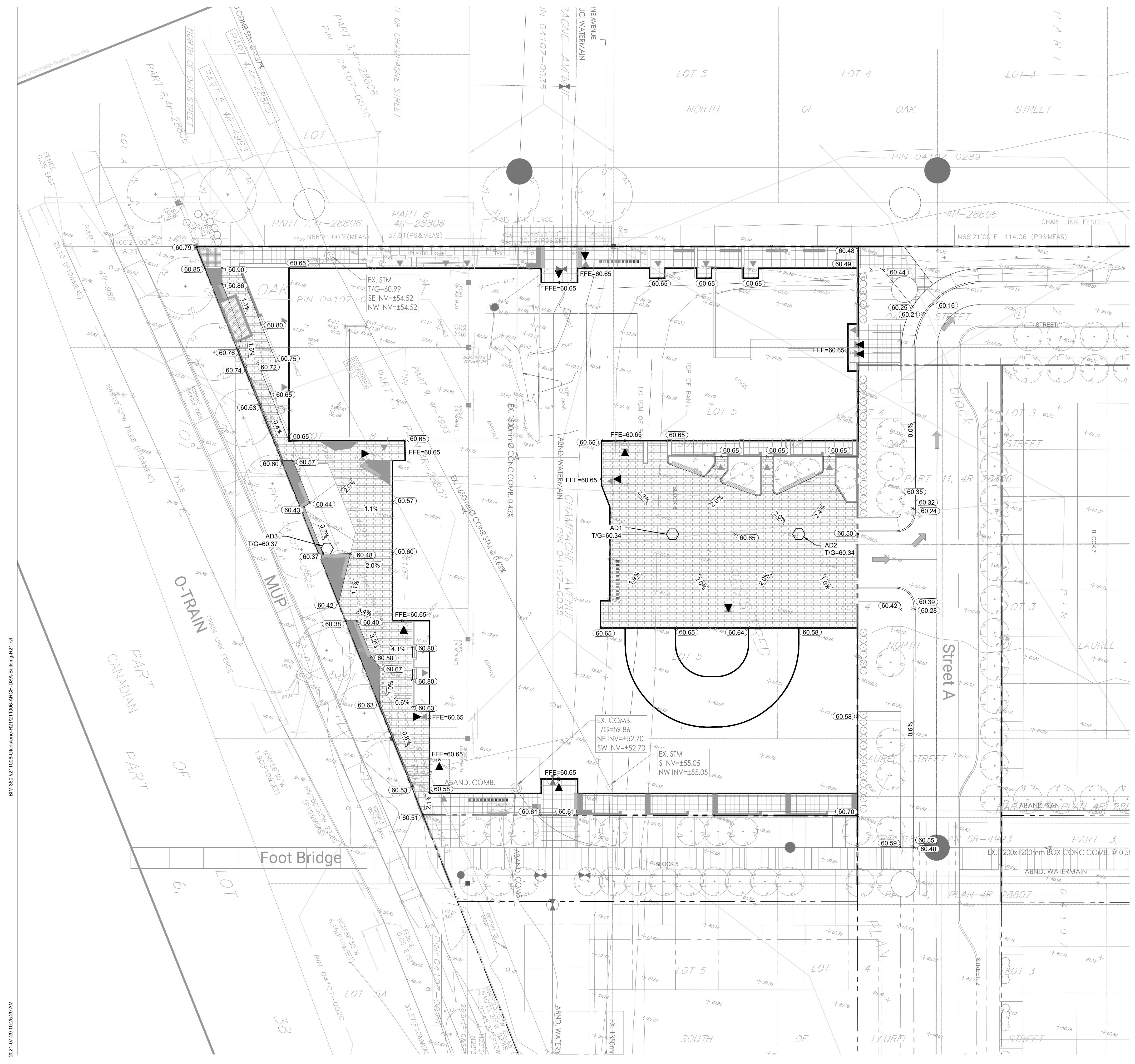
GLADSTONE VILLAGE
PHASE 1
933 Gladstone Avenue - Phase 1
211006

SITE SERVICING PLAN

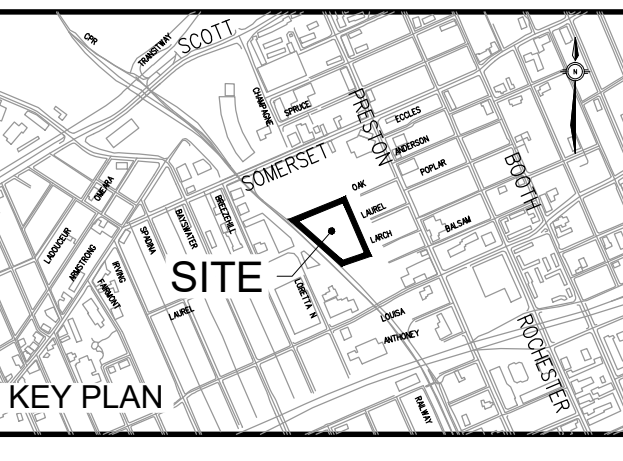
C001



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- NOTES:**
GRADING
1. ALL ELEVATIONS ARE IN METERS UNLESS OTHERWISE NOTED.
 2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS.
 3. REINSTATE ALL DISTURBED/DAMAGED AREAS TO THEIR ORIGINAL CONDITION OR BETTER.
 4. PROVIDE POSITIVE DRAINAGE, MATCHING EXISTING OVERALL DRAINAGE PATTERN INDICATED.
 5. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA AND/OR ONTARIO PROVINCIAL STANDARDS.
 6. SUBGRADE FOR THE PAVED AREAS SHALL BE PROOF ROLLED WITH A LARGE (10 TONNE MINIMUM) STEEL DRUM ROLLER UNDER DRY CONDITIONS. ANY SOFT AREAS EXPOSED FROM THE PROOF ROLLING SHOULD BE SUBEXCAVATED TO A DEPTH OF 500mm AND REPLACED WITH COMPACTED SUBGRADE FILL.
 7. ALL AREAS SHALL DRAIN AT A MINIMUM OF 1%. ANY DISCREPANCIES PREVENTING THIS SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WORK.
 8. BLEND NEW EARTHWORK INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDING AT ALL TOP AND BOTTOM OF SLOPES.
 9. CONCRETE SIDEWALKS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING SC1.4 AND SC4.
 10. CONCRETE BARRIER CURBS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING SC1.1.
 11. SAW CUT AND KEY GRIND ASPHALT AT ALL TIE-INS PER CITY OF OTTAWA STANDARD R10.
 12. REINSTATE LINE PAINTING.
 13. REFER TO GEOTECHNICAL INVESTIGATION REPORT PREPARED BY XXXX FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT SHALL REVIEW EXCAVATIONS PRIOR TO THE PLACEMENT OF GRANULAR MATERIAL.

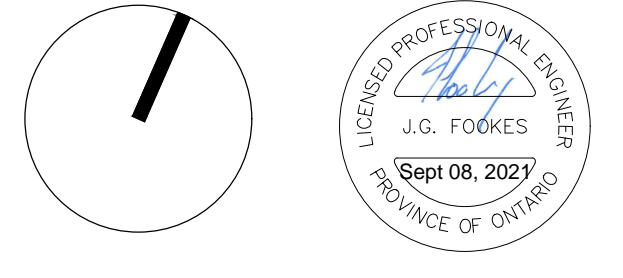


ISSUED

No.	Date	Description
1	2021 AUG 03	ISSUED FOR 100% SD
2	2021 SEP 08	ISSUED FOR SITE PLAN APPROVAL

LEGEND

- NEW AREA DRAIN
- PROPOSED ELEVATION
- EXTRAPOLATED EXISTING ELEVATION
- PROPOSED SLOPE DIRECTION
- MAJOR OVERLAND FLOW PATH
- PAVERS - REFER TO LANDSCAPE
- LANDSCAPED ISLAND - REFER TO LANDSCAPE



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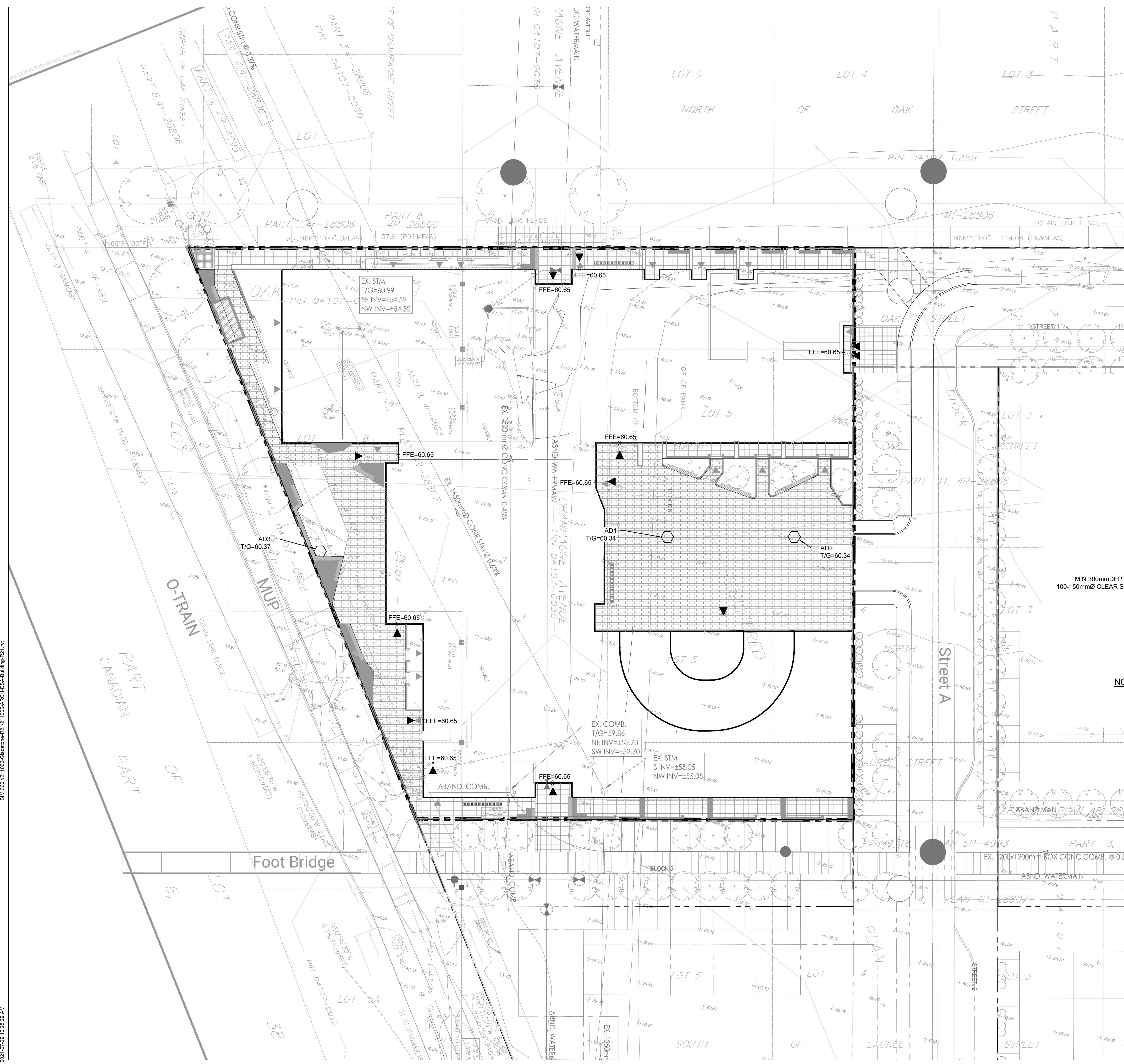
GRADING PLAN

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 Project No: 210101900
 Date: 08/09/21

C002

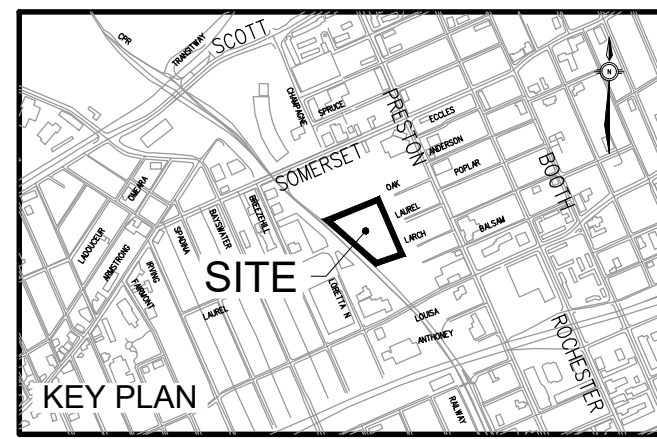
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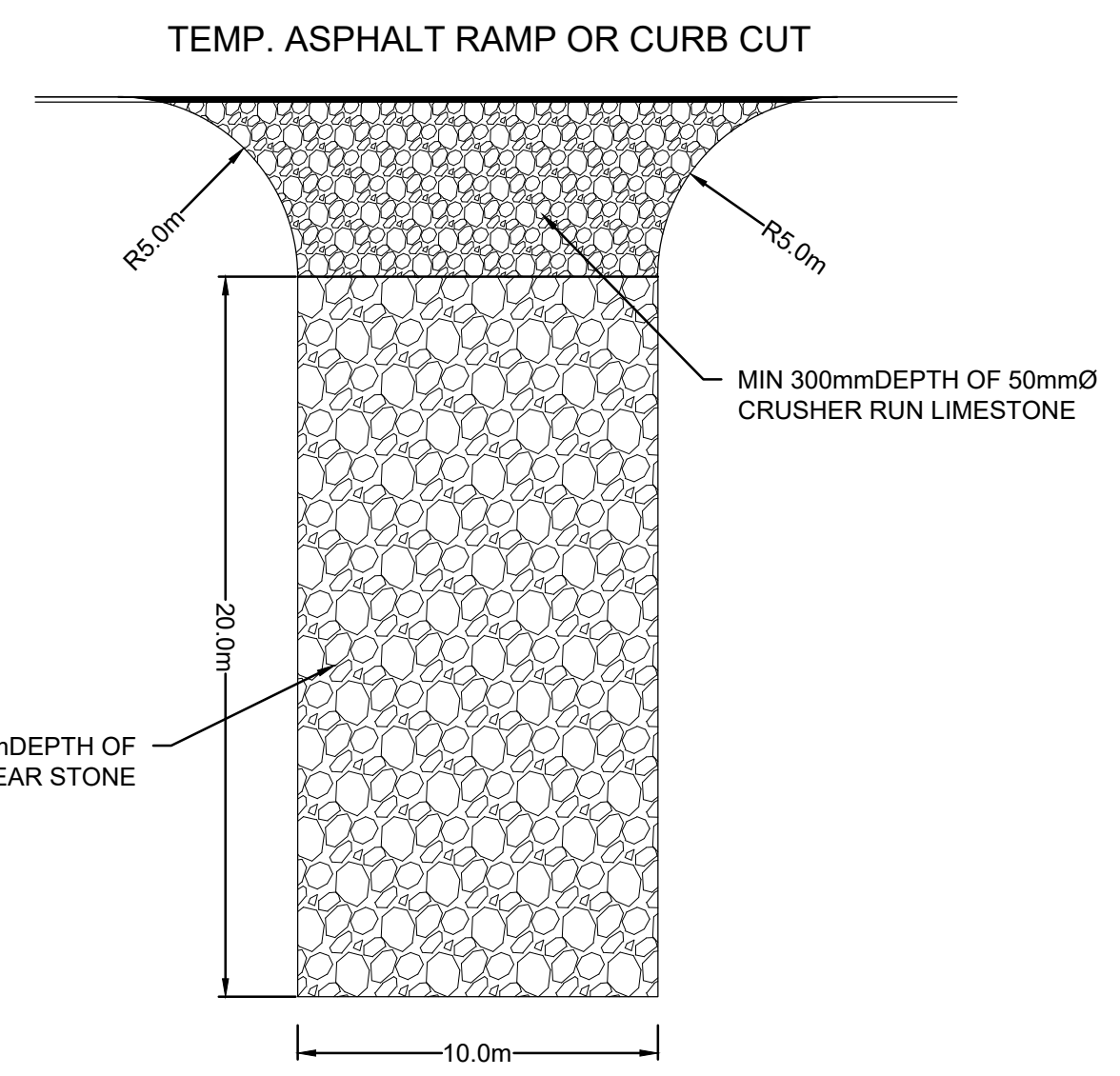
EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, USING CATCH BASIN SEDIMENT PROTECTION AND INSTALLING SILT FENCES AND OTHER EFFECTIVE SEDIMENT TRAPS. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
2. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IMPLEMENTED PRIOR TO CONSTRUCTION AND REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED.
3. REGULAR INSPECTION AND MAINTENANCE OF THE EROSION AND SEDIMENT MEASURES SHALL BE UNDERTAKEN. THE IMPLEMENTATION AND ADJUSTMENT AND/OR CORRECTIVE MAINTENANCE OF THE EROSION AND SEDIMENT MEASURES IS AN INTEGRAL PART OF THE PLAN AND MUST BE PERFORMED.
4. CONTRACTOR IS RESPONSIBLE TO KEEP THE ROADS FREE AND CLEAN FROM MUD AND DEBRIS. AS A MINIMUM THIS SHALL INCLUDE SWEEPING LIBRARY ROAD DAILY DURING EXCAVATION WORK.
5. THE SEDIMENT AND EROSION CONTROL MEASURES MAY BE MODIFIED IN THE FIELD AT THE DISCRETION OF THE CITY OF OTTAWA SITE INSPECTOR OR CONSERVATION AUTHORITY.



ISSUED

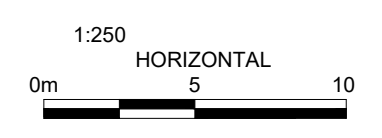
No.	Date	Description
1	2021 SEP 08	ISSUED FOR SITE PLAN APPROVAL



- NOTES:**
1. INSTALL AT ALL SITE ACCESS LOCATIONS.
 2. TEMPORARY CONSTRUCTION ACCESS SHALL BE REMOVED ON COMPLETION OF THE WORK AND ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

LEGEND

- LIGHT DUTY SILT FENCE BARRIER (PER OPSD 219.110)



Scale: 1:250
Project No: 210101900
Date: 08/09/21

C003

GLADSTONE VILLAGE PHASE 1
933 Gladstone Avenue - Phase 1
211006

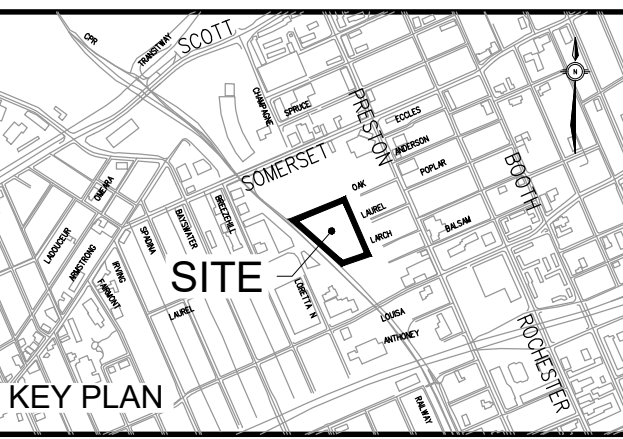
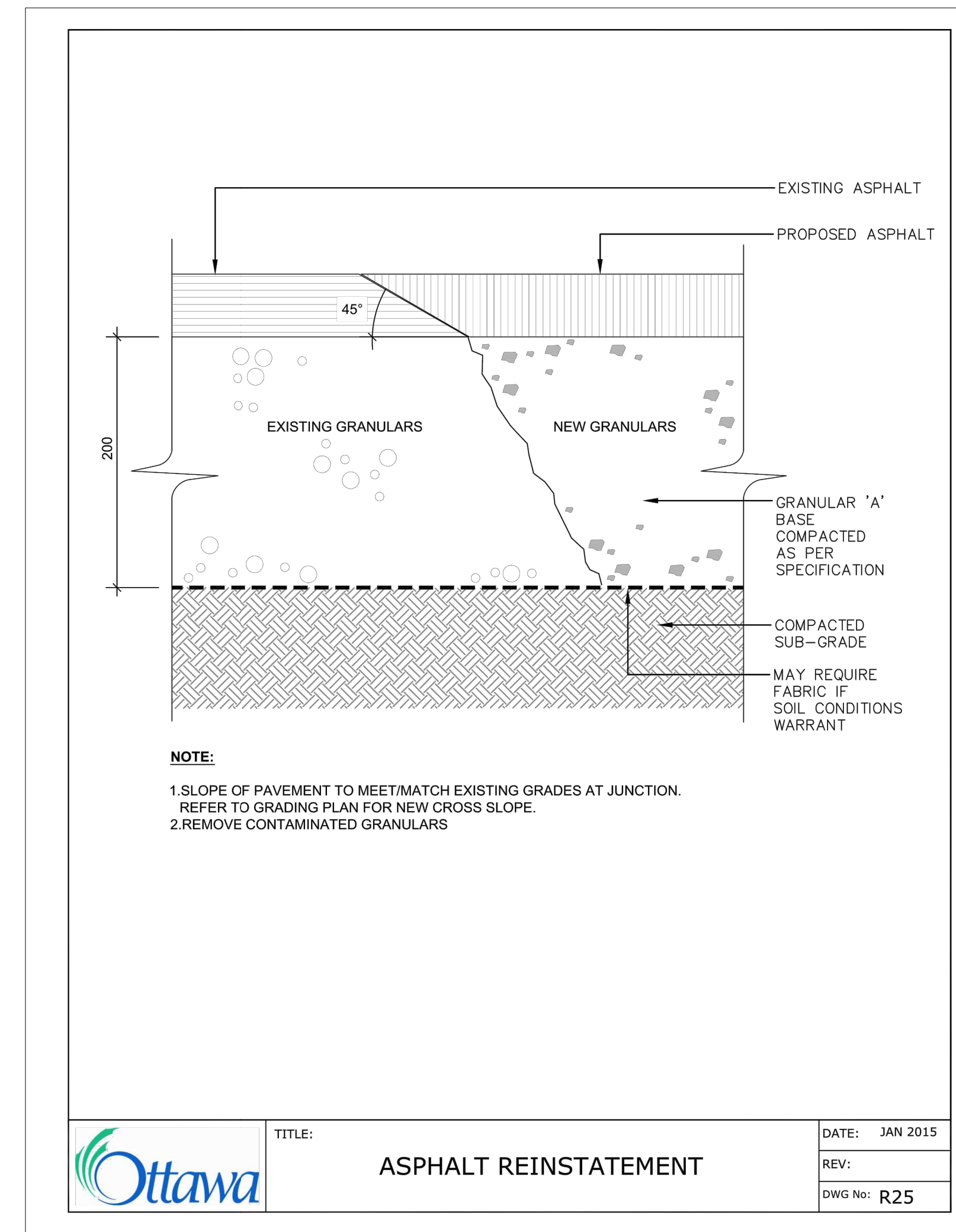
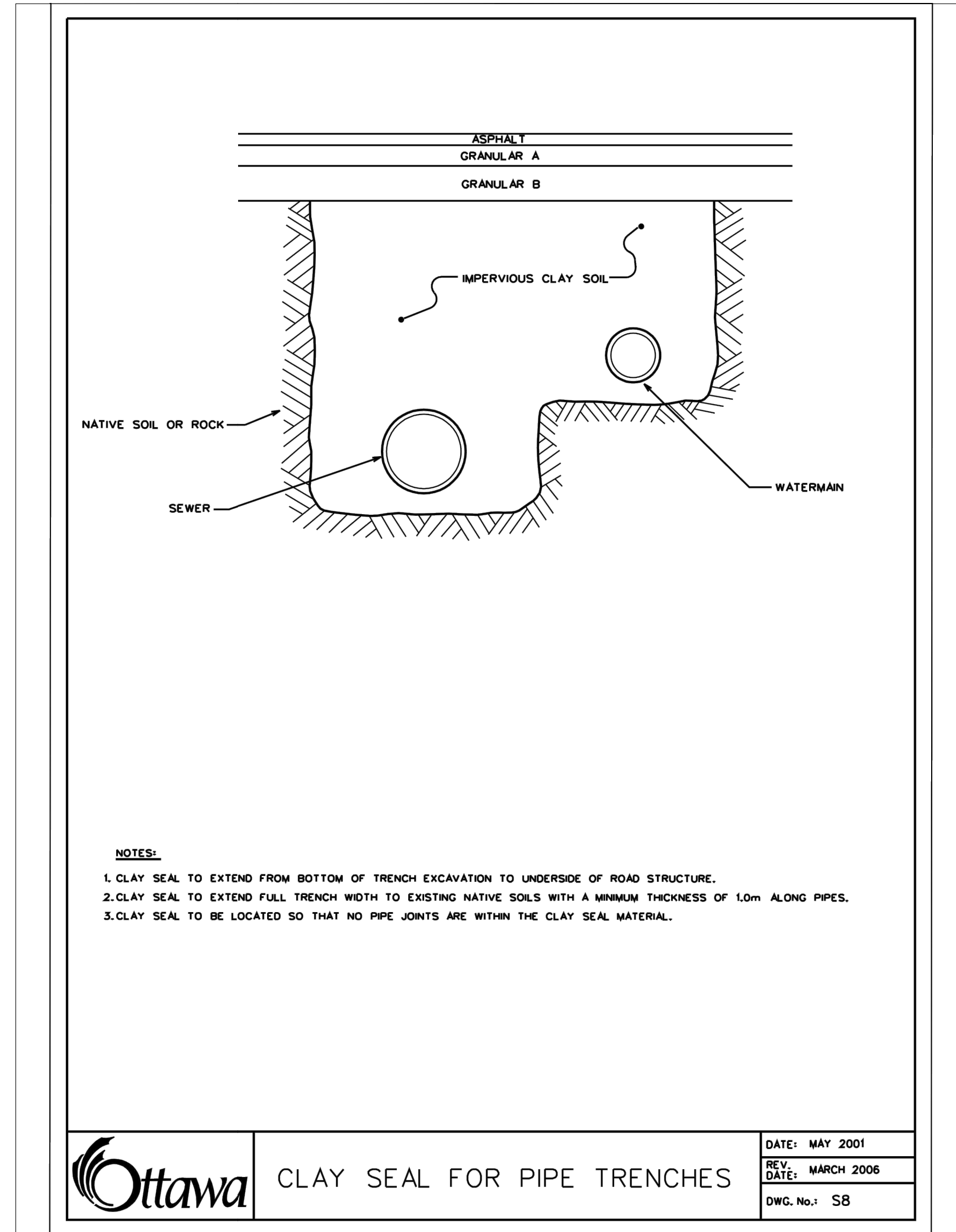
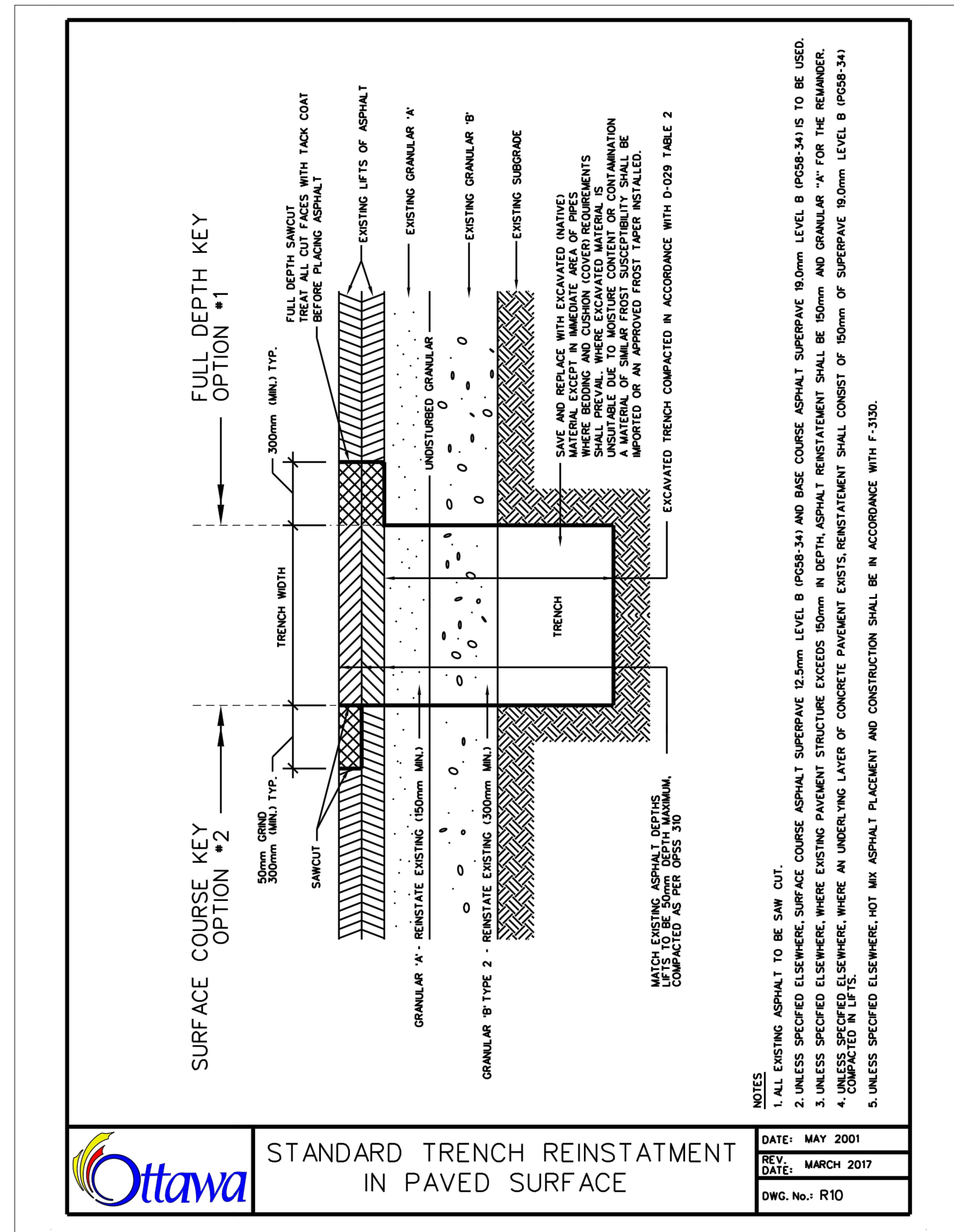
EROSION AND SEDIMENT CONTROL PLAN

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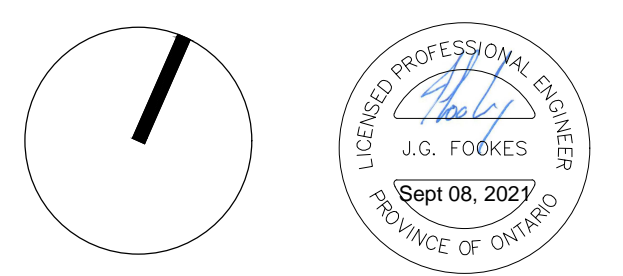
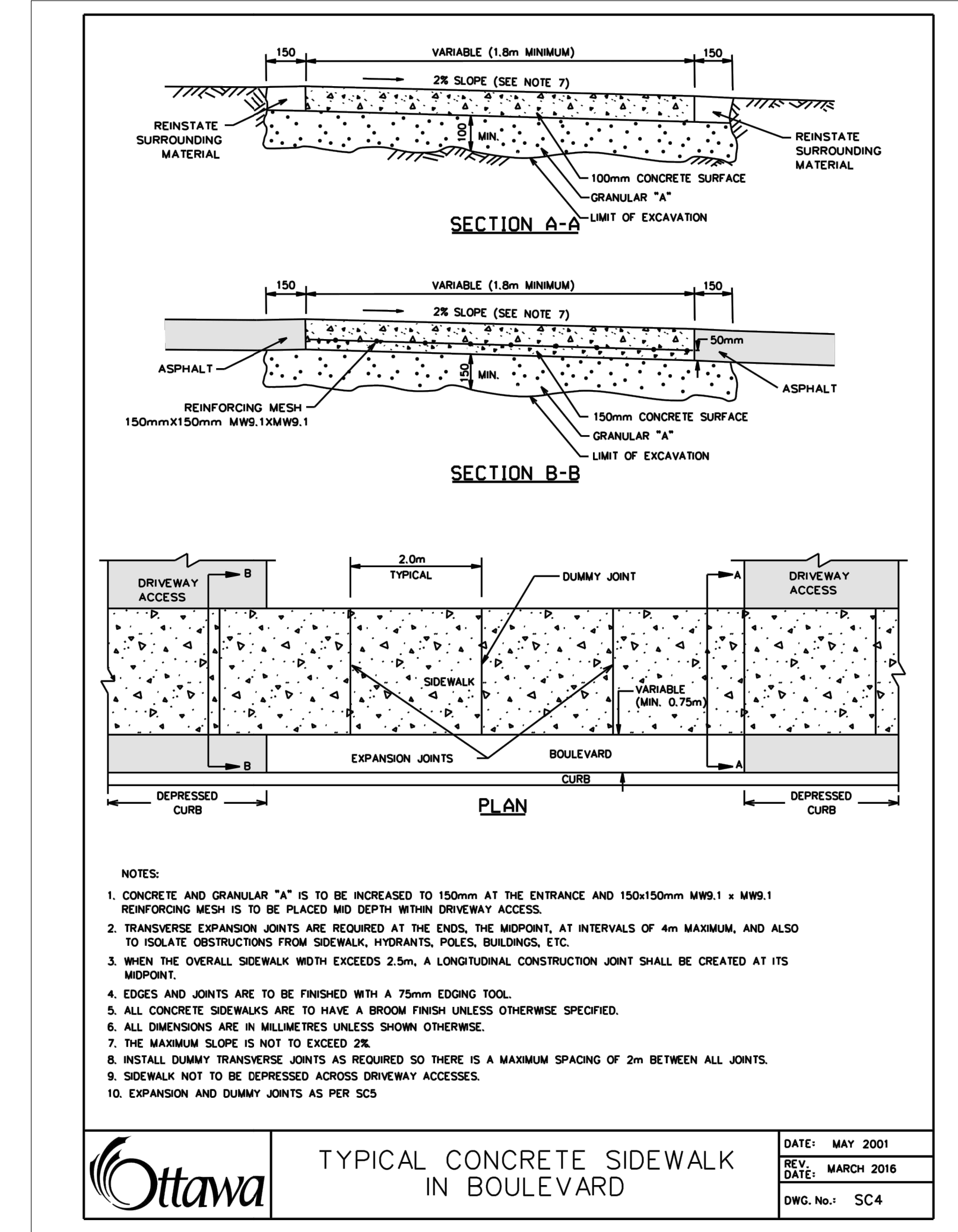
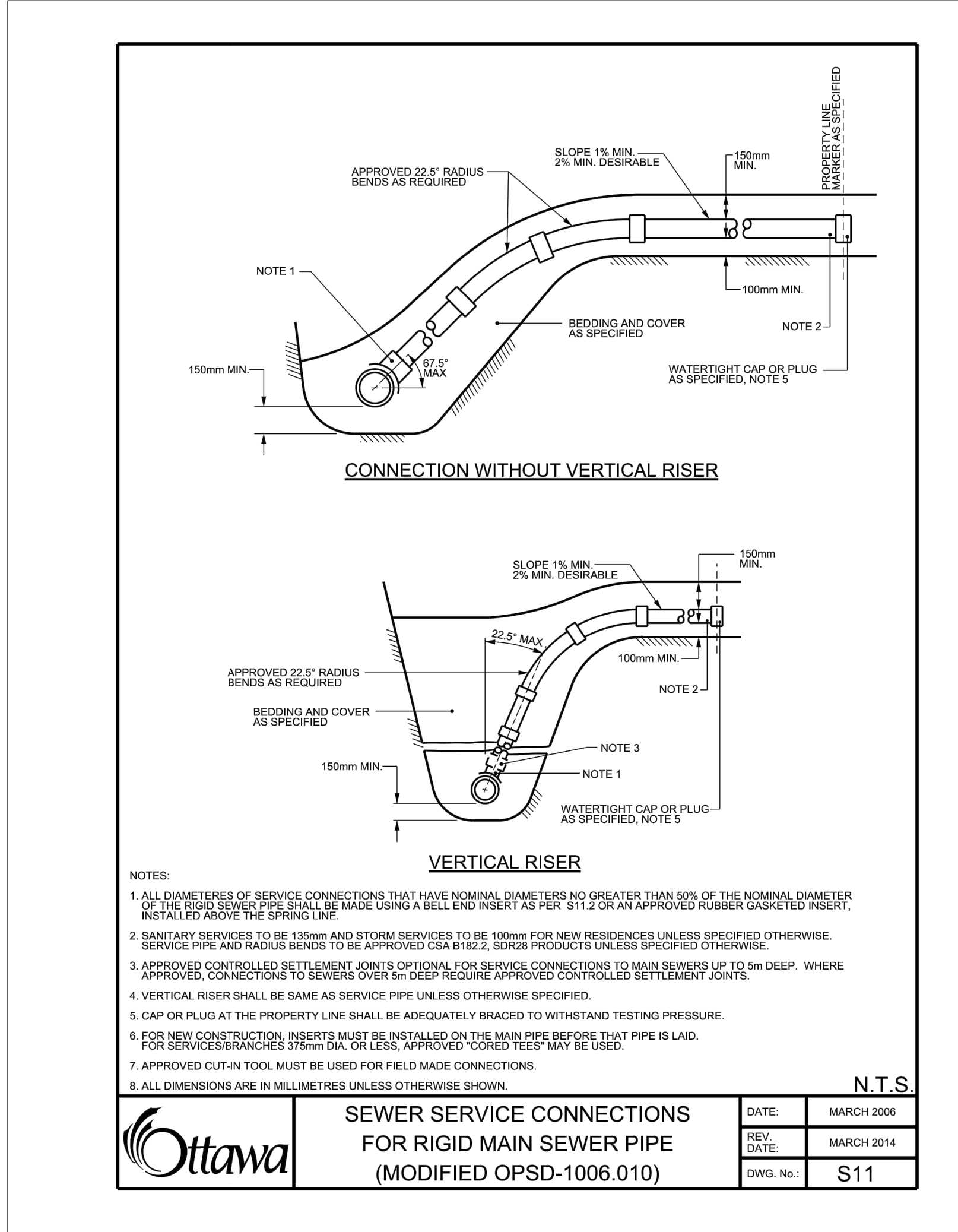
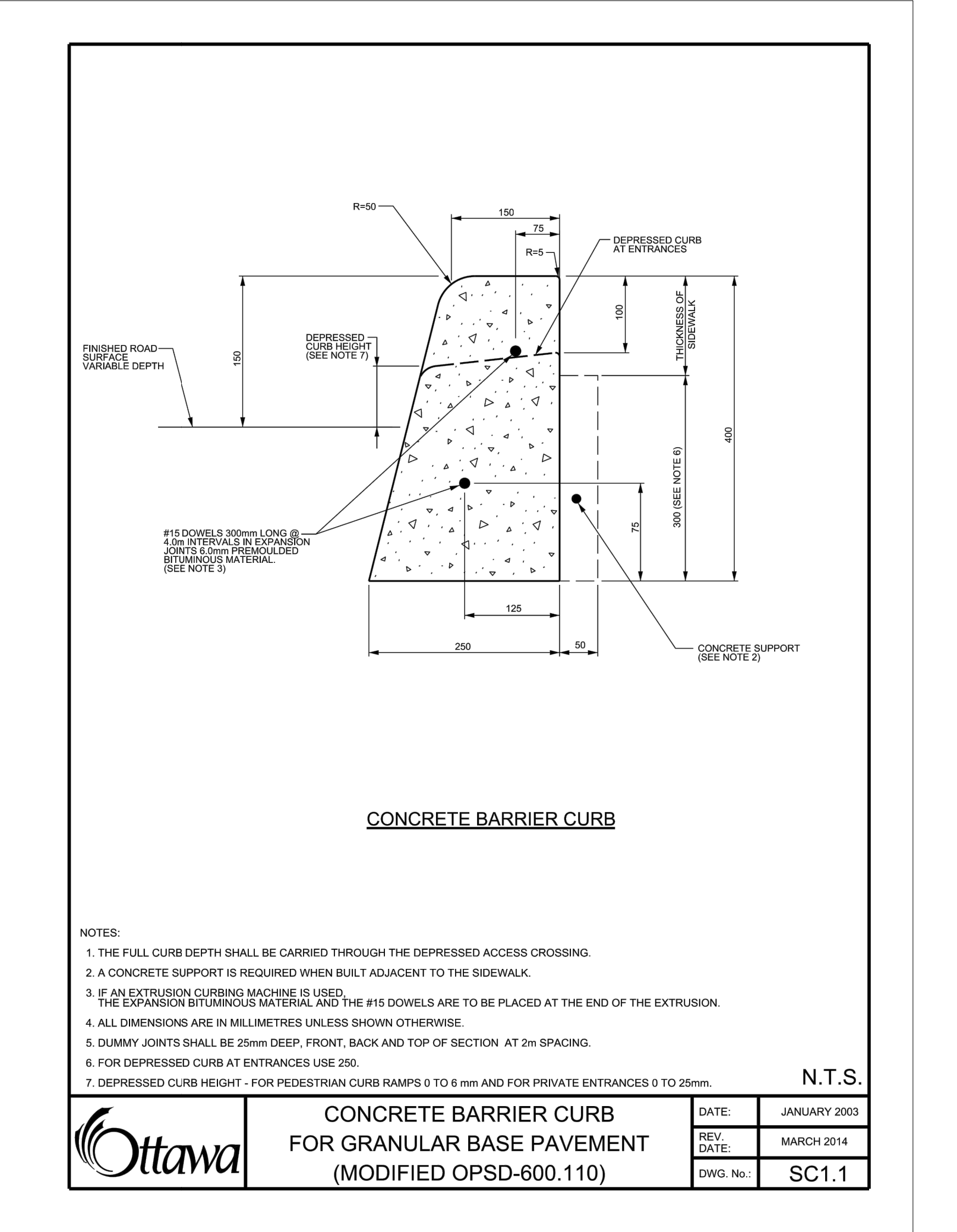
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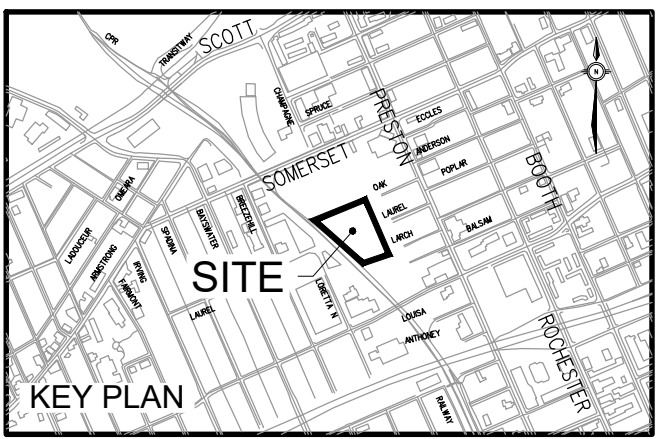
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PHASE 1
933 Gladstone Avenue - Phase 10
211006

DETAILS 2

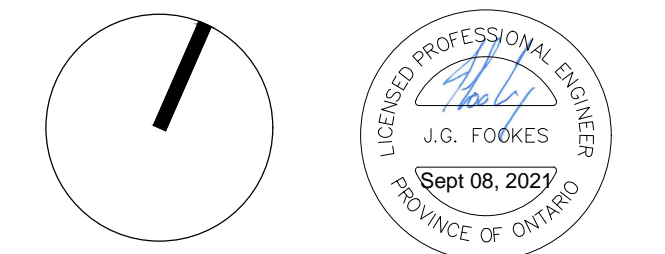
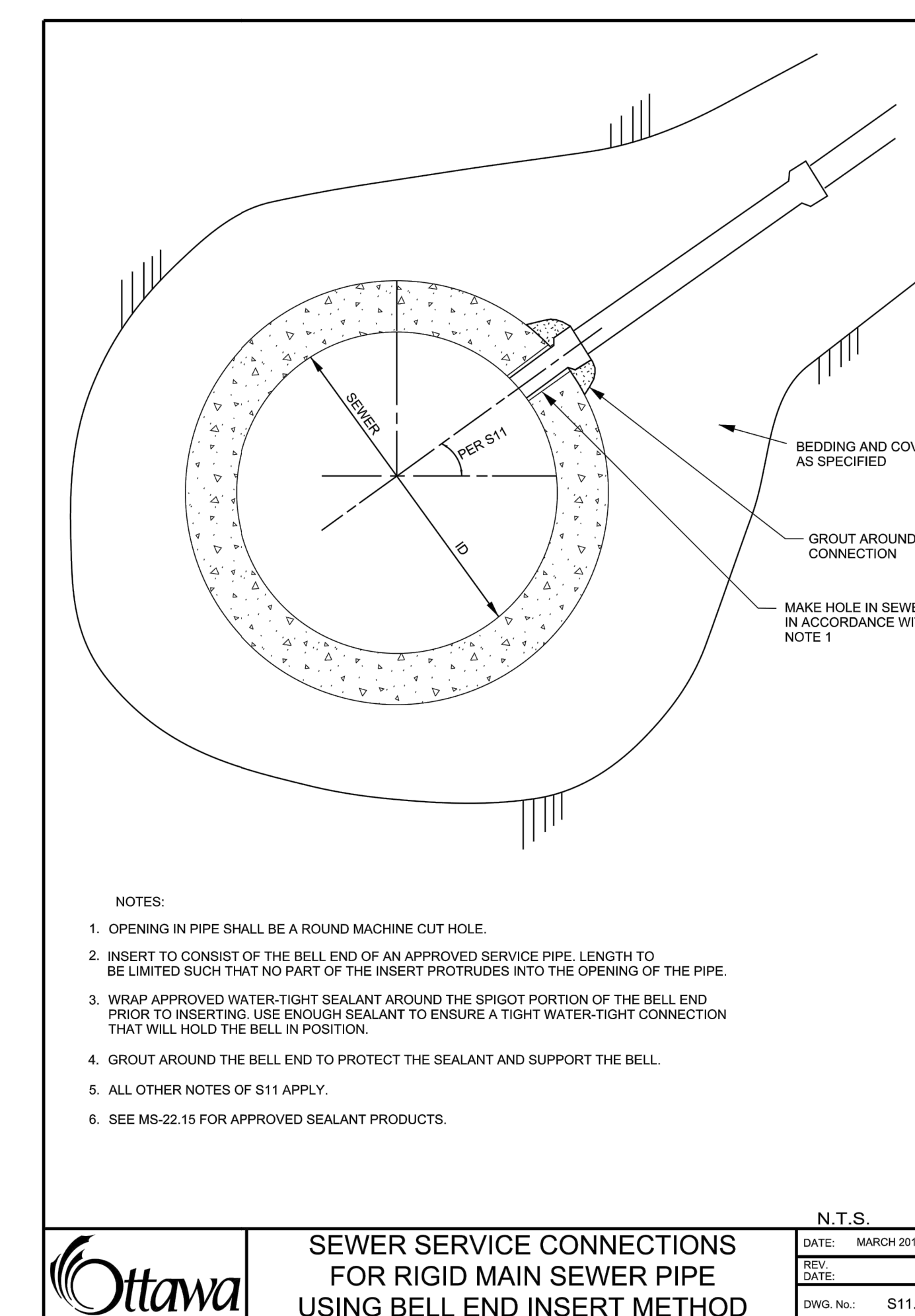
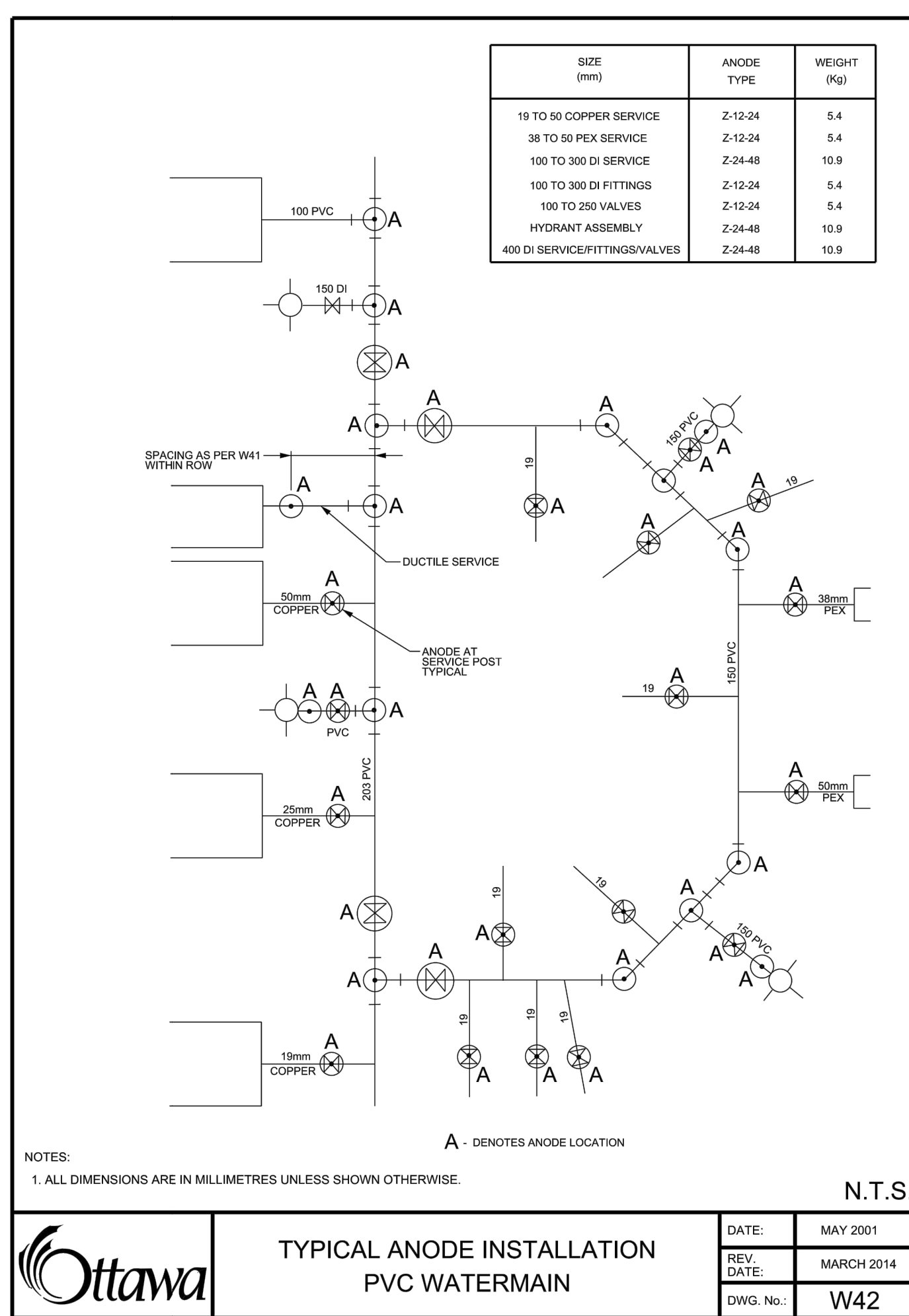
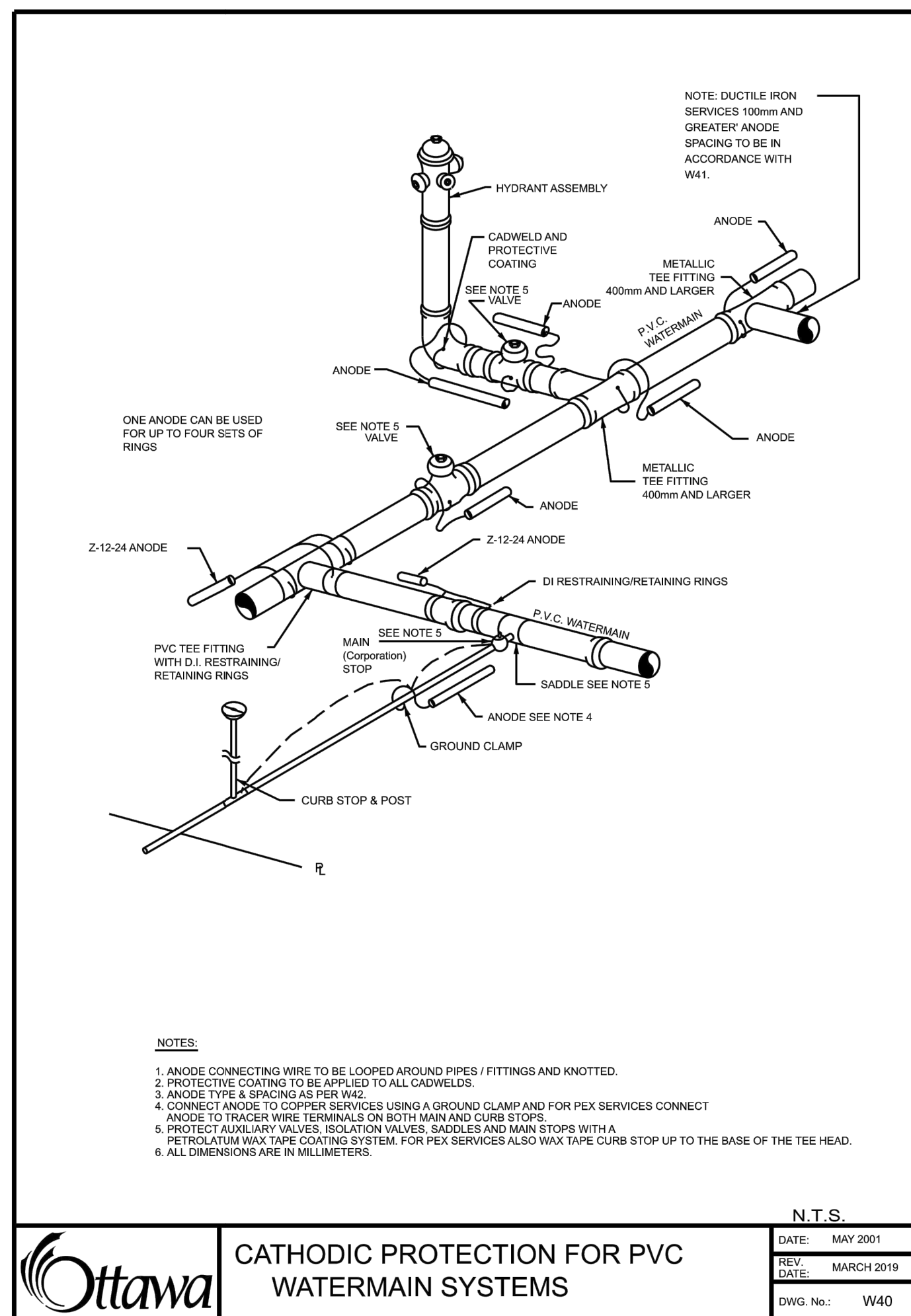
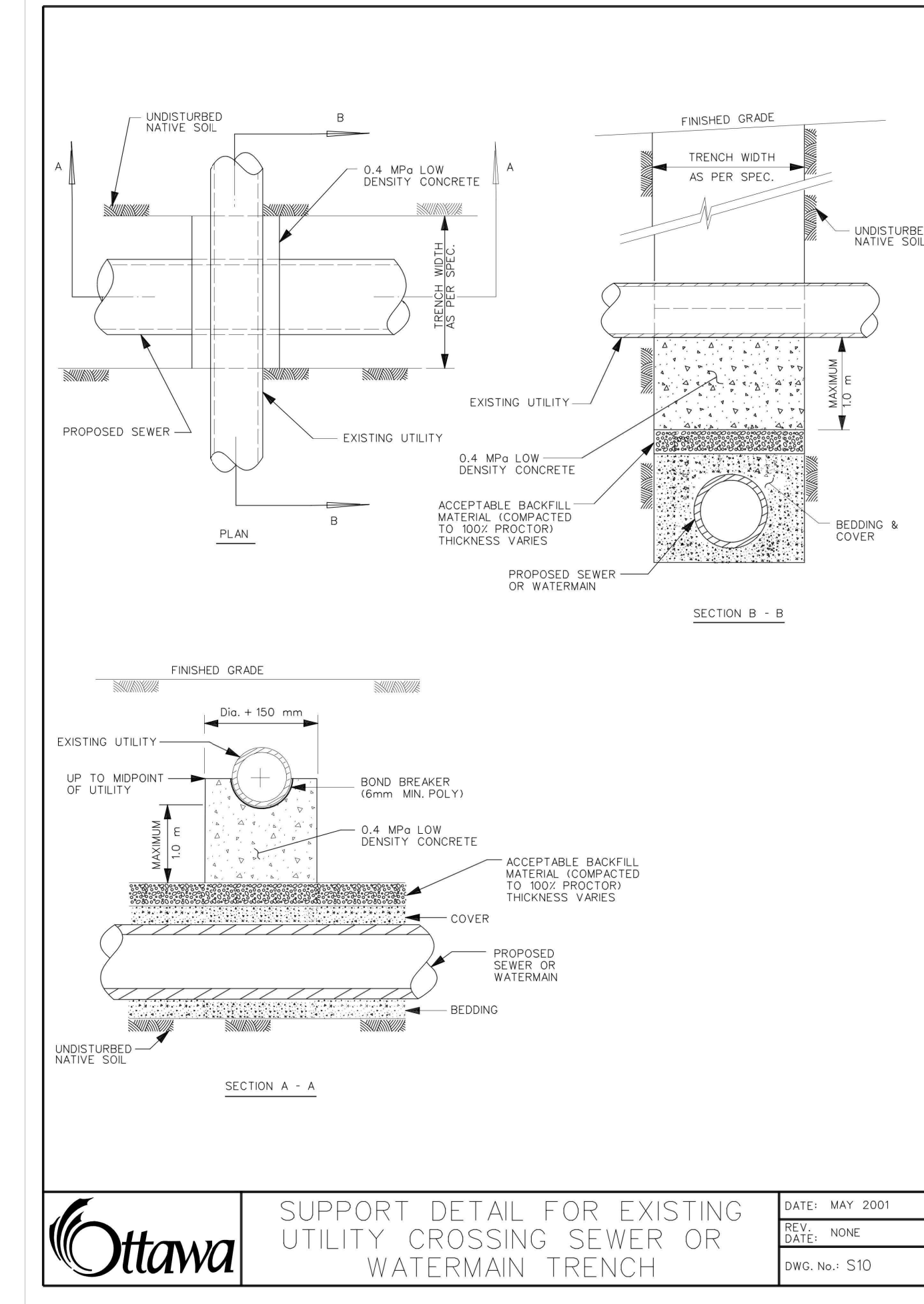
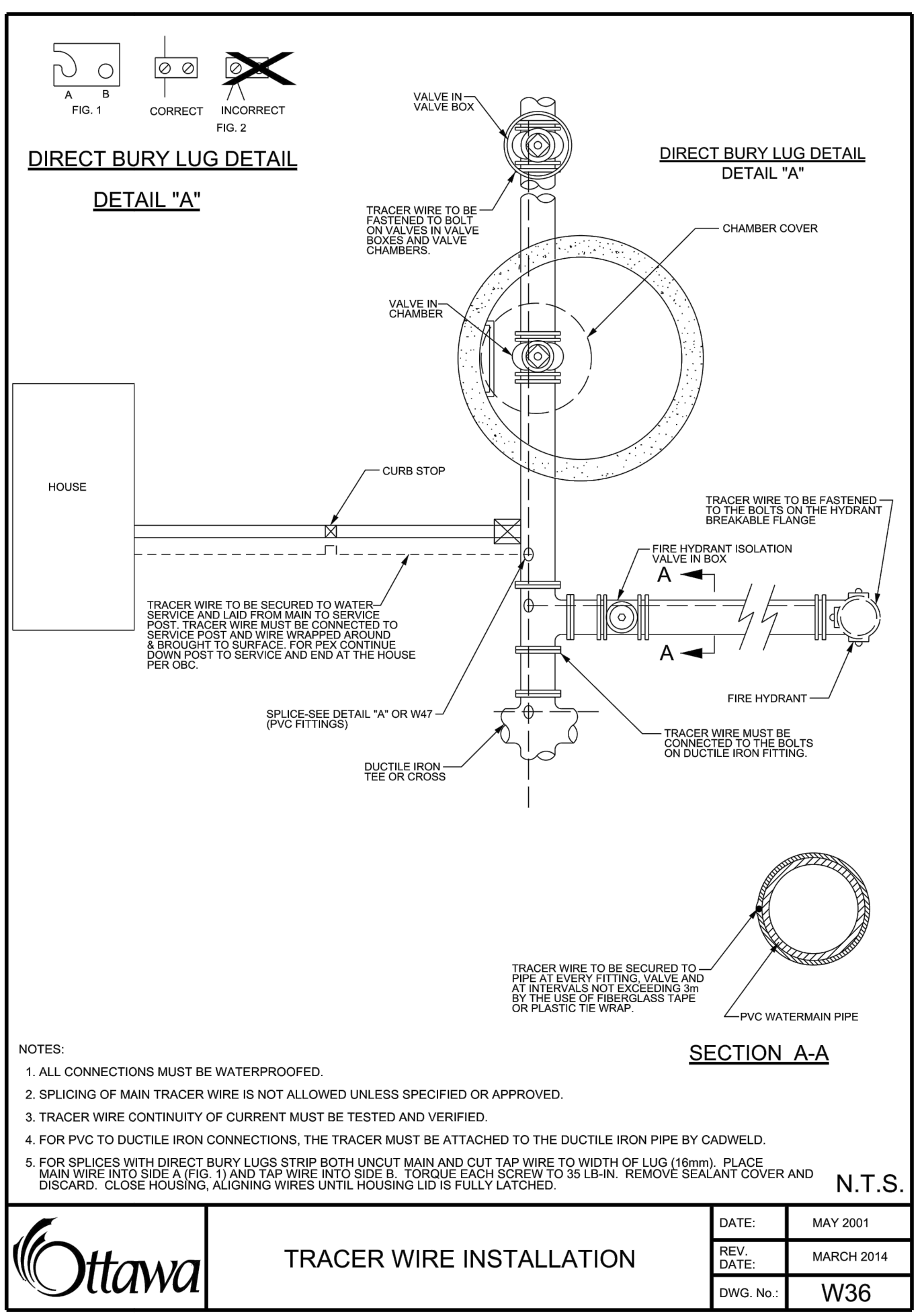
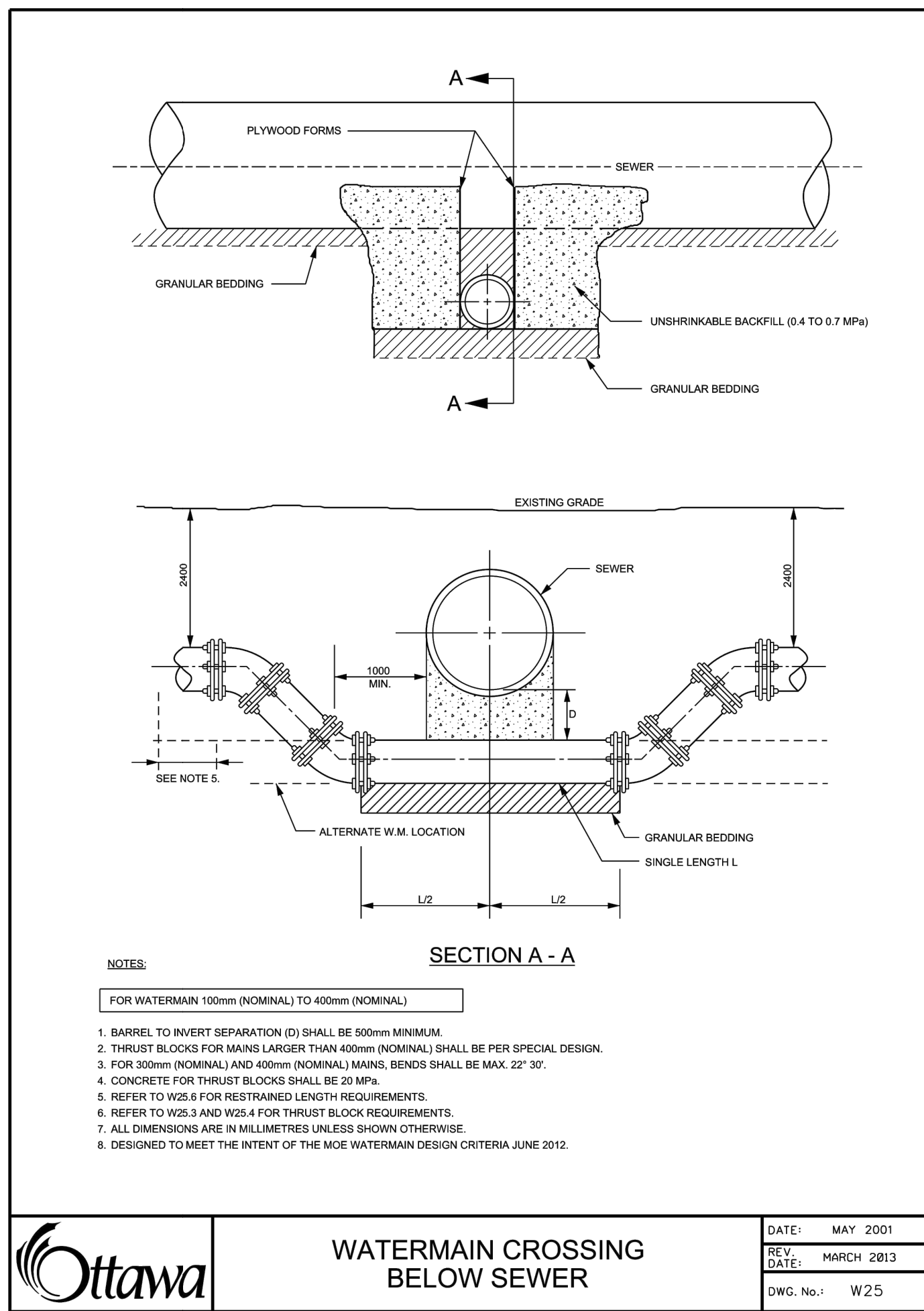
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C102



ISSUED

No.	Date	Description
1	2021 SEP 08	ISSUED FOR SITE PLAN APPROVAL



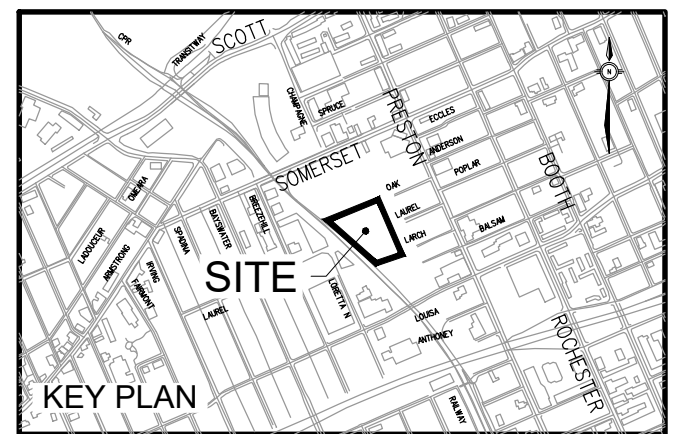
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GLADSTONE VILLAGE PHASE 1
933 Gladstone Avenue - Phase 1
211006

DETAILS 3

Scale: N/A
Project No: 210101900
Date: 08/09/21

C103



ISSUED

No.	Date	Description
1	2021 SEP 08	ISSUED FOR SITE PLAN APPROVAL

1 2021 SEP 08 ISSUED FOR SITE PLAN APPROVAL

CONDITION	WATERMAIN	SERVICES
EARTH	150 Mm.	150 Mm.
ROCK	300 Mm.	150 Mm.

DATE: MAY 2001
REV. DATE: MARCH 2016
DWG. No.: W17

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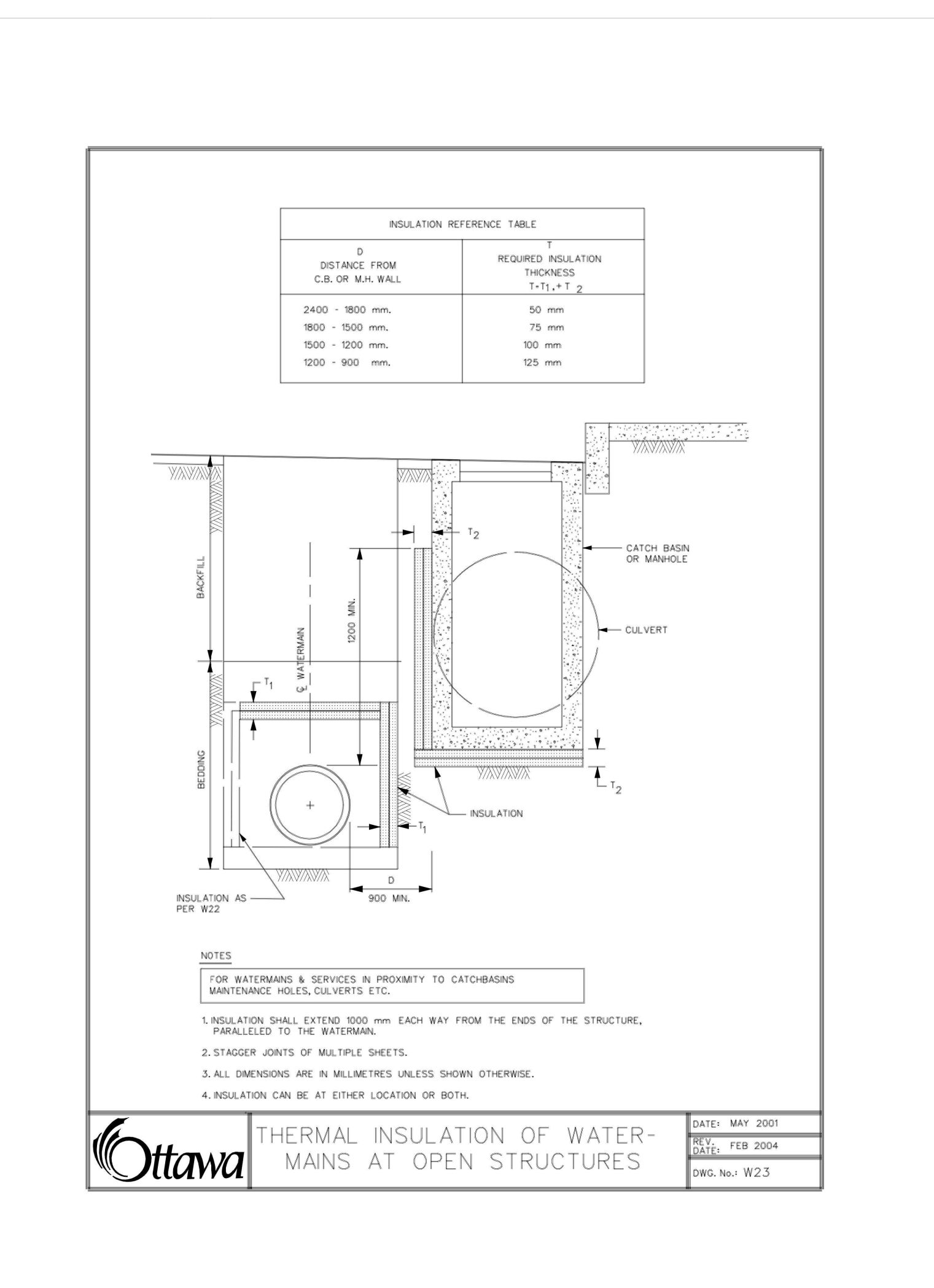
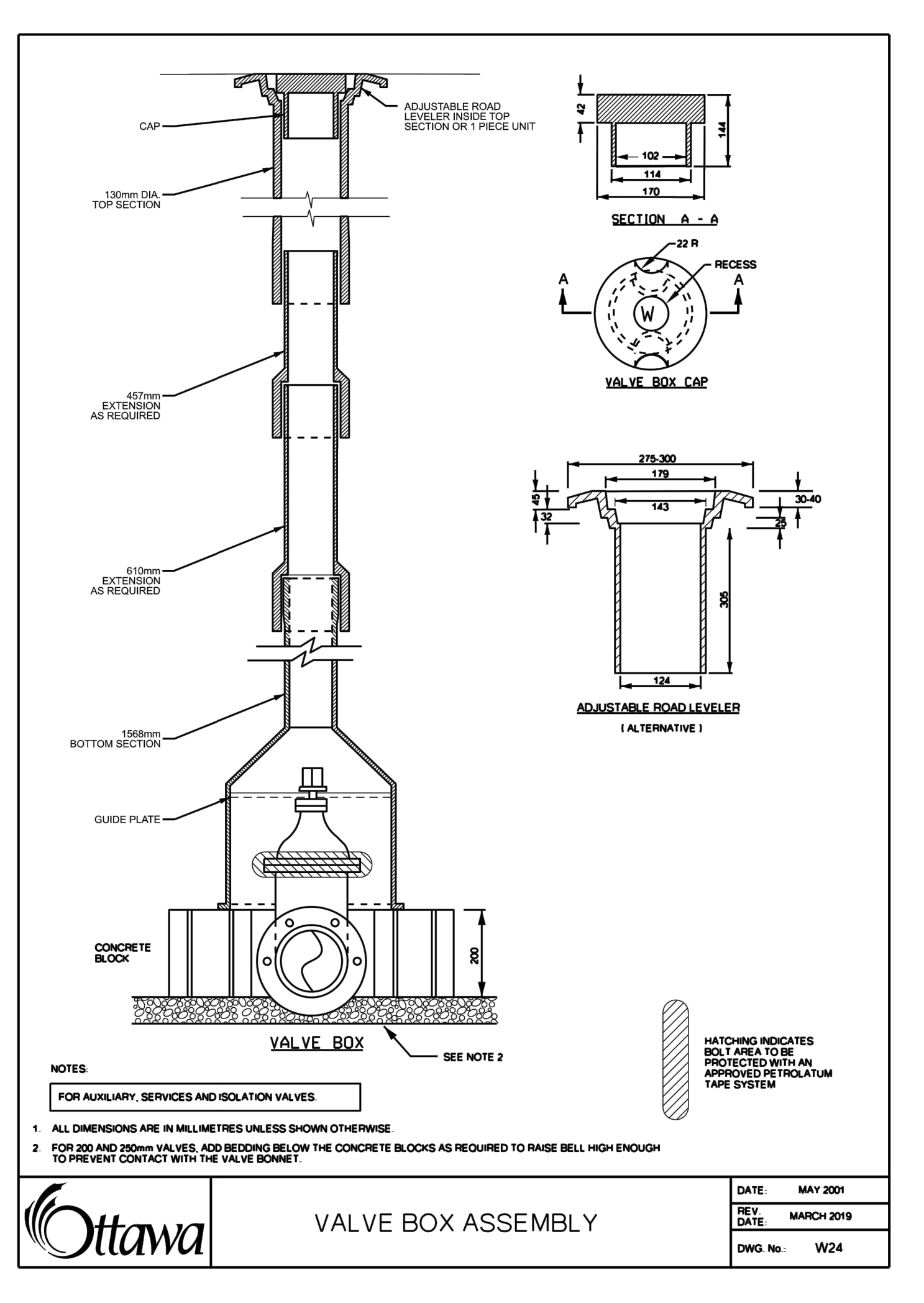
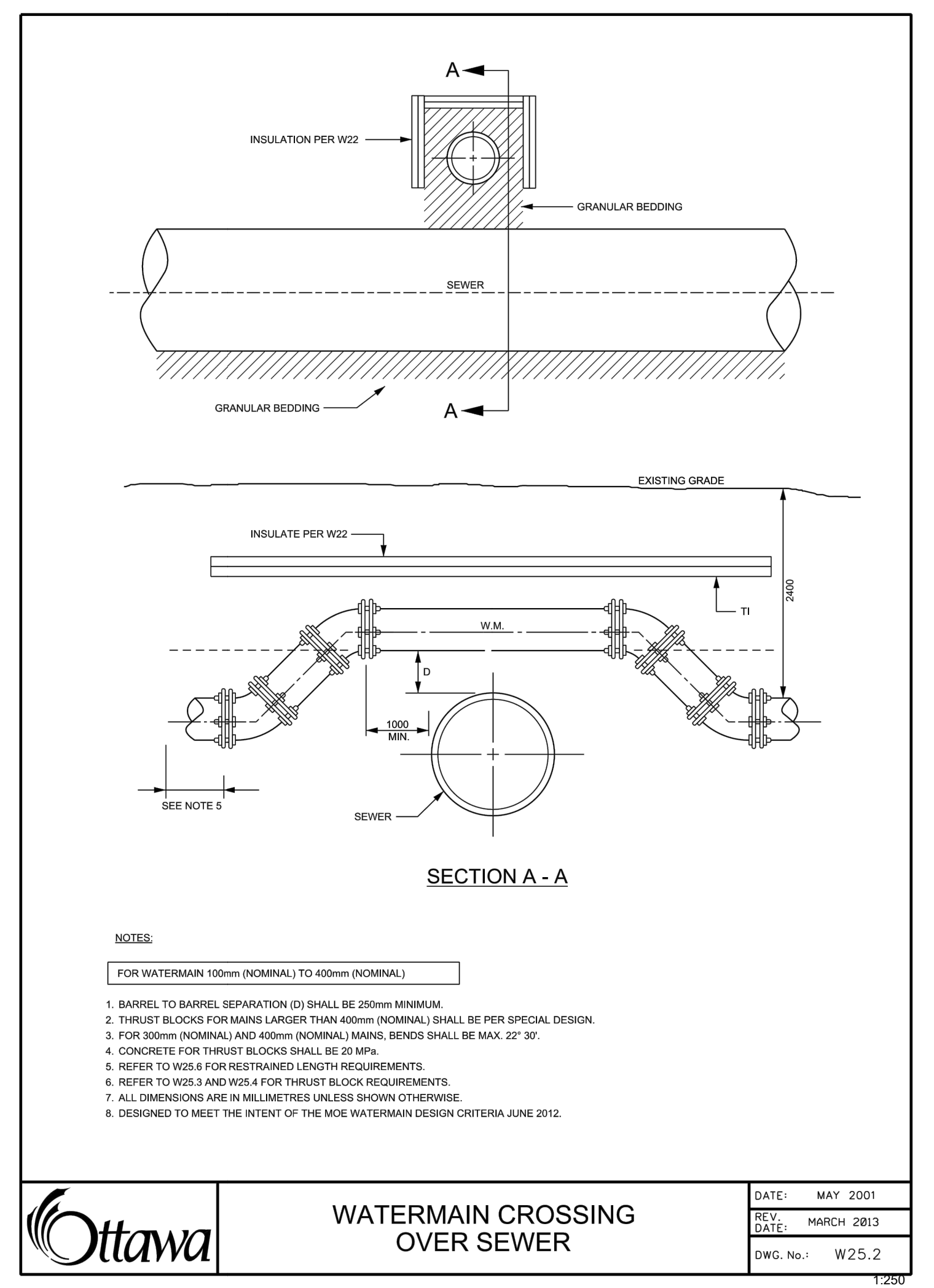
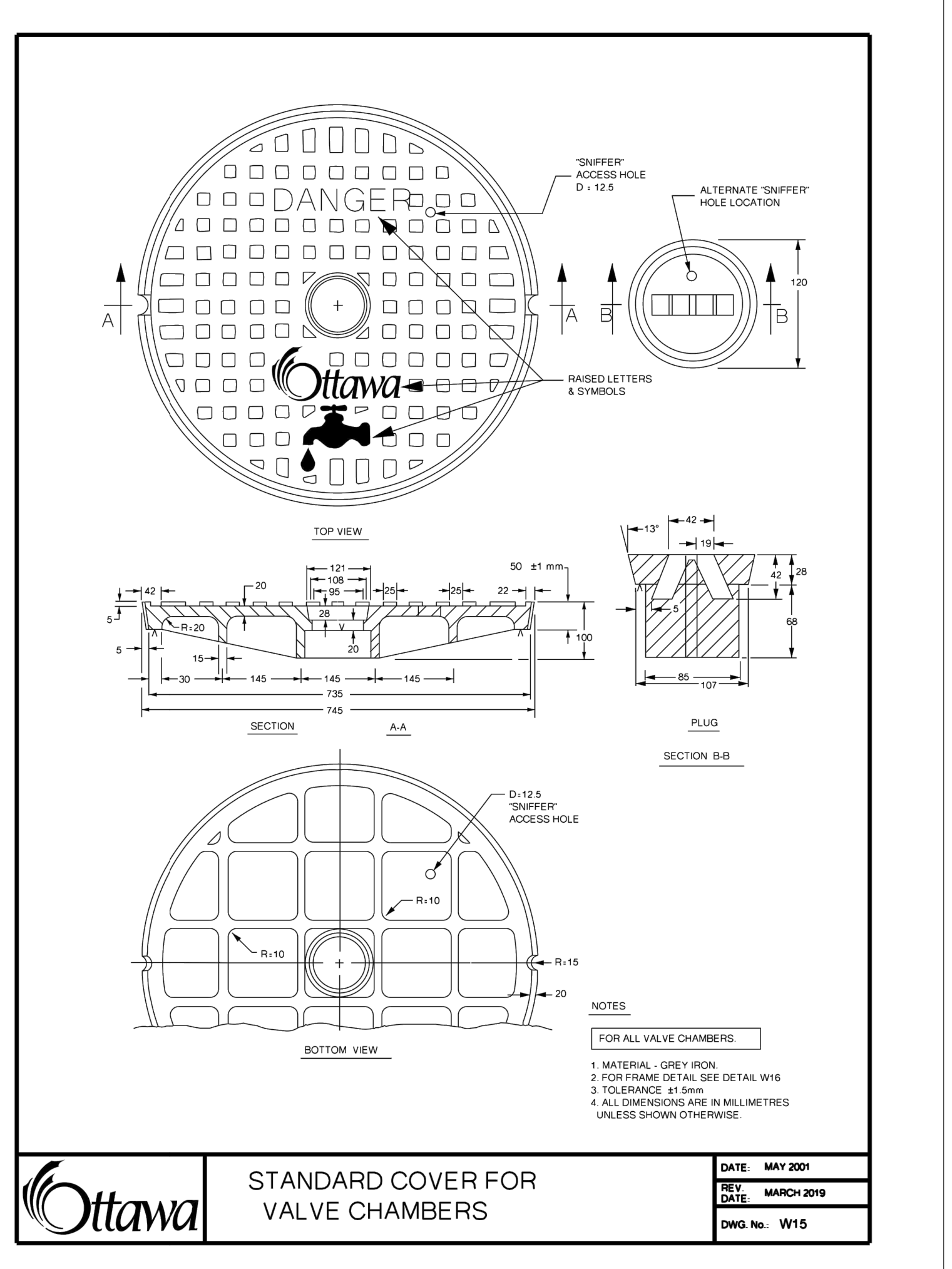
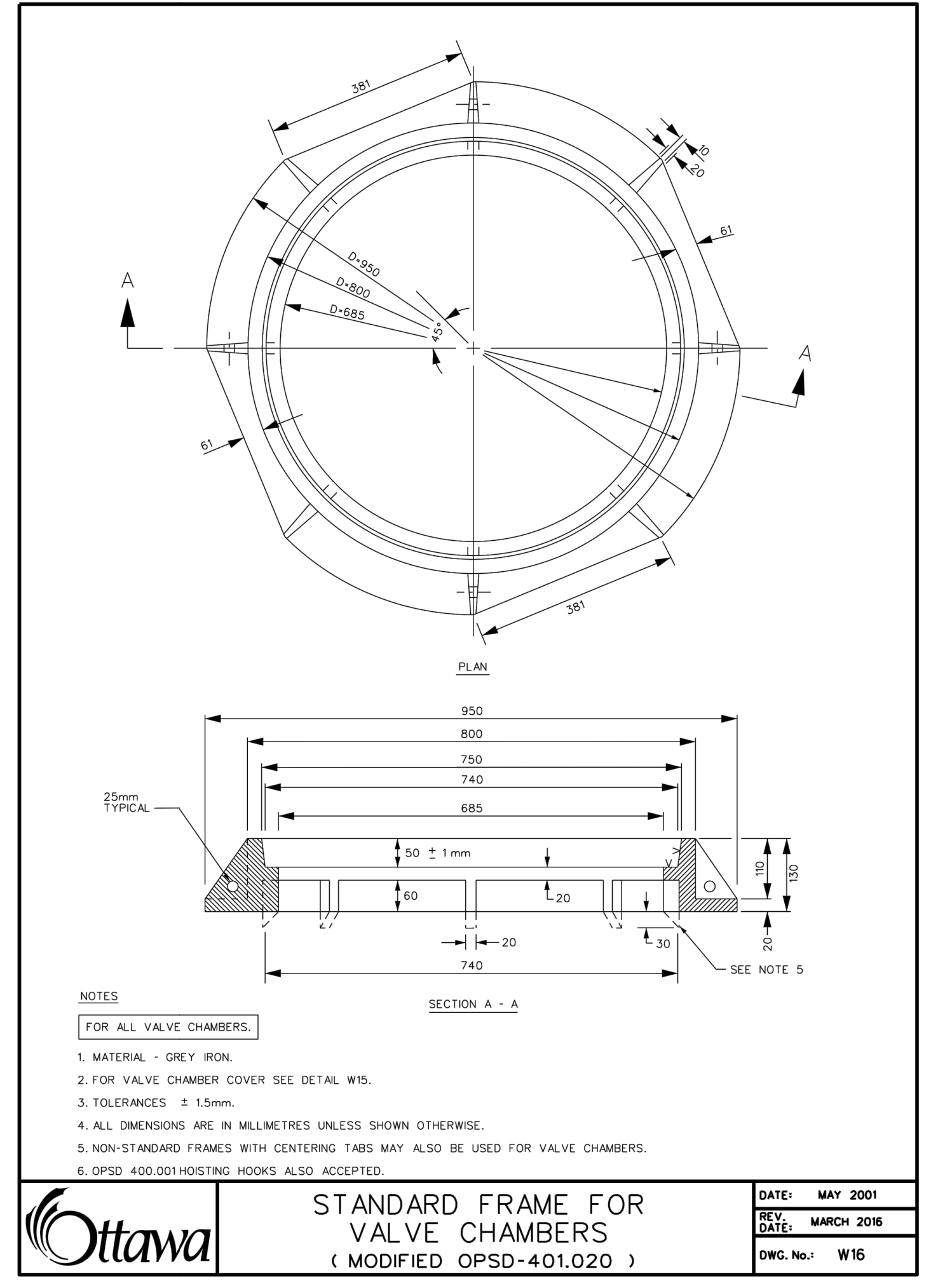
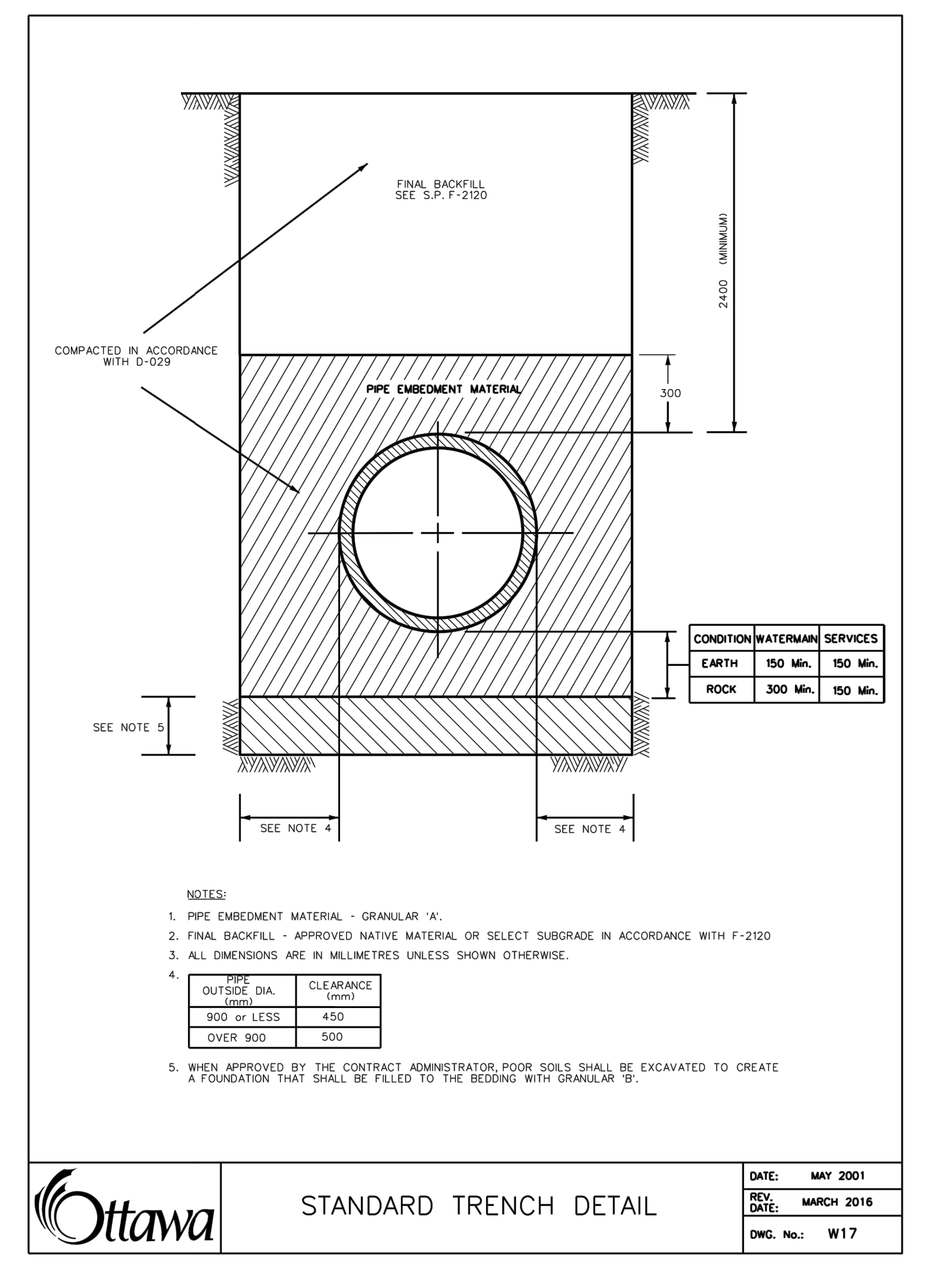
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GLADSTONE VILLAGE
PHASE 1
933 Gladstone Avenue - Phase 1
211006

Scale: N/A
Project No: 210101900
Date: 08/09/21

DETAILS 4

C104



BIM 300/01/1006-Gladstone-82/21 1006-ARCH-DISA-Building-R21.rvt

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CONCRETE THRUST BLOCKS FOR PVC AND DI PIPE 400mm AND UNDER

NOTES:

- CONCRETE SHALL BE PLACED TO WITHIN 50mm OF FACE OF THE BELL.
- BOND BREAKER TO BE USED BETWEEN CONCRETE AND FITTINGS.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
- REFER TO W25.4 FOR ADDITIONAL REQUIREMENTS.
- THRUST BLOCKS SHALL BE 20 MPa CONCRETE AND AS SHOWN ON ABOVE DRAWINGS UNLESS OTHERWISE DIRECTED BY THE CONTRACT ADMINISTRATOR. THE BLOCK SHALL BE CENTERED ON THE THRUST FORCE AND SHALL ALSO PARTIALLY CHAMFER THE FITTING TO DISTRIBUTE THE FORCE. THE SIDES OF THE BLOCK SHALL BE 80mm FROM THE JOINT ON EITHER SIDE OF THE BEND OR TEE.
- THE CONCRETE WHERE POSSIBLE SHALL BE PLACED AGAINST UNDISTURBED SOIL AT THE BOTTOM AND SIDE OF THE TRENCH. WHERE IT IS NOT POSSIBLE, THE FILL BETWEEN THE BEARING SURFACE AND THE UNDISTURBED SOIL MUST BE COMPACTED IN ACCORDANCE WITH D-029.
- EXCEPT FOR THE ADDITION OF WATER, CONCRETE FOR THRUST BLOCKS SHALL COME PREMIXED FROM CONCRETE SUPPLIER. AS READY MIX FROM A CONCRETE TRUCK ON-SITE MIXING OF CEMENT, SAND AND AGGREGATE ETC. BY THE CONTRACTOR, FOR THE PURPOSE OF MAKING CONCRETE THRUST BLOCKS/ ANCHORS WILL NOT BE ACCEPTED.

Ottawa DATE: MAY 2001
REV. DATE: MARCH 2016
DWG. No.: W25.3

TABLE OF RESTRAINED LENGTHS FOR DI AND PVC WATERMAIN PIPE IN STANDARD GRANULAR 'A' EMBEDMENT IN SOILS OF BEARING CAPACITY OF 100 KPa AND OVER

REDUCERS SMALLER DIAMETER (UNRESTRAINED)	LARGER DIAMETER SIDE (TO BE RESTRAINED)					
	100mm	150mm	200mm	250mm	300mm	400mm
100mm	N/A	3	6	8	10	14
150mm	N/A	N/A	4	6	9	13
200mm	N/A	N/A	N/A	3	6	11
250mm	N/A	N/A	N/A	N/A	4	9
300mm	N/A	N/A	N/A	N/A	N/A	7
400mm	N/A	N/A	N/A	N/A	N/A	N/A

PIPE DIAMETER
100mm 150mm 200mm 250mm 300mm 400mm

DEAD ENDS, CAPS, PLUGS, VALVES

BEFORE CAPS AND EITHER SIDE OF VALVES - L	5	6	9	10	12	16
---	---	---	---	----	----	----

VERTICAL BENDS

LENGTH HIGH SIDE - LHS	3	4	5	6	7	9
LENGTH LOW SIDE - LLS	1.5	2	2.5	3	3.5	4.5

TEES

LENGTH ALONG THE BRANCH - L	1	1	1	1	1	1
LENGTH ALONG THE RUN - Lr	3	3	3	3	3	3

HORIZONTAL BENDS

11.25, 22.5, AND 45 DEGREE BENDS	1	1.5	1.5	2	2	2.5
----------------------------------	---	-----	-----	---	---	-----

NOTES:

- THE ABOVE RESTRAINED LENGTHS MEET OR EXCEED THE WATERMAIN DESIGN CRITERIA FOR FUTURE ALTERATIONS AUTHORIZED UNDER A DRINKING WATER WORKS PERMIT.
- THE ASSUMPTIONS MADE FOR THE ABOVE CALCULATIONS ARE AS FOLLOWS:
 - MAXIMUM OPERATING PRESSURE OF 100 psi
 - MAXIMUM SURGE PRESSURE WITH A FLOW VELOCITY CHANGE OF 0.6 m/s OF 115 psi (115 psi FOR CLASS 52 DI AND FOR PVC MAX. SURGE IS 35 psi)
- FOR SOFTWARE CALCULATIONS A TEST PRESSURE OF 150 psi AND A SAFETY FACTOR OF 1.5 WAS USED WHICH RESULTS IN 225 psi MAXIMUM PRESSURE.
- TYPE S TRENCH BEDDING.
- DEPTH TO BURY 2.4 METRES EXCEPT FOR VERTICAL BENDS WHERE THE HIGH SIDE IS AT 1.8 METRES.
- EMBEDMENT MATERIAL GRANULAR 'A' WITH CHARACTERISTICS OF ASTM D2487 GP.
- GP SOILS ARE DESCRIBED AS POORLY GRADED GRAVEL AND SAND-GRAVEL MIXES WITH LITTLE OR NO FINES.
- DI MUST BE OF SOLID PIPE WITHOUT JOINTS, FITTINGS ETC.
- THE TABLES APPLY TO BOTH DUCTILE IRON AND PVC. WHERE ONE LENGTH EXCEEDED THE OTHER THE LONGER LENGTH WAS USED.
- RESTRAINED LENGTHS ARE IN METRES.

Ottawa DATE: MAY 2001
REV. DATE: MARCH 2011
DWG. No.: W25.6

RESTRAINING AND RETAINING RINGS FOR PVC AND DI PIPE 400mm AND UNDER

NOTES:

- ANY JOINT THAT FALLS WITHIN THE RECOMMENDED LENGTH (L) SHALL BE RESTRAINED. SEE DRAWING W25.6
- TO REDUCE THE NUMBER OF RESTRAINERS REQUIRED THE USE OF FULL PIPE LENGTHS IS RECOMMENDED IN THESE AREAS.

Ottawa DATE: MAY 2001
REV. DATE: NONE
DWG. No.: W25.5

1. SOIL DESCRIPTION: VERY FINE SANDS, SANDY CLAYS, CLAYS. SOILS WITH TYPICAL BEARING STRENGTH OF 100 TO 199 KPa

PIPE DIAMETER	DIMENSION NOTED ON W25.3			
	A	B	C	D
102	250	250	200	200
152	400	400	250	300
203	550	550	300	450
254	650	650	400	500
305	800	800	450	650
406	1050	1050	600	850

2. SOIL DESCRIPTION: SILTY SAND GRAVELS OR CLAYEY SAND GRAVEL MIXTURES, MODERATE AMOUNT OF FINES. SOILS WITH TYPICAL BEARING STRENGTH OF 200 TO 299 KPa

PIPE DIAMETER	DIMENSION NOTED ON W25.3			
	A	B	C	D
102	200	200	150	150
152	250	250	200	200
203	350	350	250	270
254	450	450	300	350
305	500	500	350	400
406	750	750	400	600

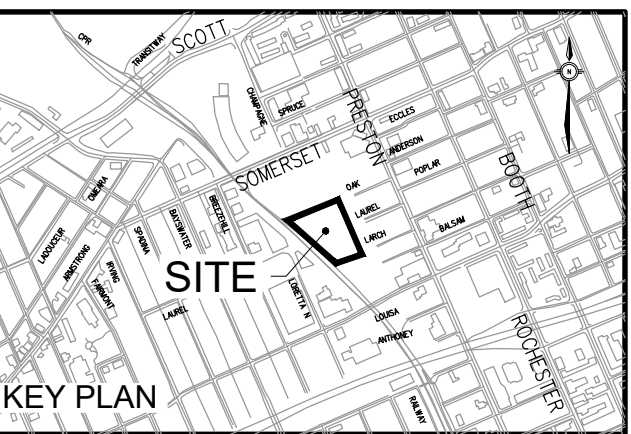
3. SOIL DESCRIPTION: SANDS, GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES. SOILS WITH TYPICAL BEARING STRENGTH OF 300 KPa AND OVER

PIPE DIAMETER	DIMENSION NOTED ON W25.3			
	A	B	C	D
102	150	150	150	150
152	200	200	200	200
203	300	300	200	230
254	400	400	250	270
305	450	450	300	300
406	650	650	350	450

NOTES:

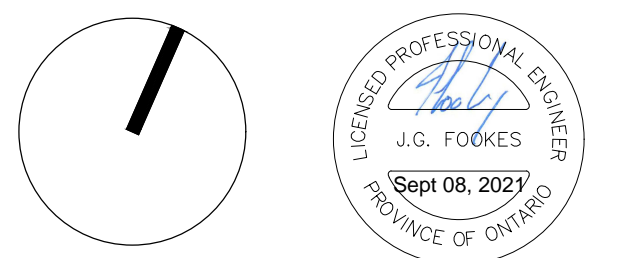
- THE ABOVE THRUST BLOCK DIMENSIONS MEET OR EXCEED THE WATERMAIN DESIGN CRITERIA FOR FUTURE ALTERATIONS AUTHORIZED UNDER A DRINKING WATER WORKS PERMIT.
- THE ASSUMPTIONS MADE FOR THE ABOVE CALCULATIONS ARE AS FOLLOWS:
 - MAXIMUM OPERATING PRESSURE OF 100 psi
 - MAXIMUM SURGE PRESSURE WITH A FLOW VELOCITY CHANGE OF 0.6 m/s OF 115 psi (115 psi FOR CLASS 52 DI AND FOR PVC MAX. SURGE IS 35 psi)
- THE TABLES APPLY TO BOTH DUCTILE IRON AND PVC. WHERE ONE LENGTH EXCEEDED THE OTHER THE LONGER LENGTH WAS USED.
- DIMENSIONS MAY BE ADJUSTED SO LONG AS THE BEARING SURFACE AREA OF THE THRUST BLOCK IS NOT REDUCED.
- TO BE USED IN CONJUNCTION WITH W25.3.

Ottawa DATE: MAY 2001
REV. DATE: MARCH 2011
DWG. No.: W25.4



ISSUED

No.	Date	Description
1	2021 SEP 08	ISSUED FOR SITE PLAN APPROVAL



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211006

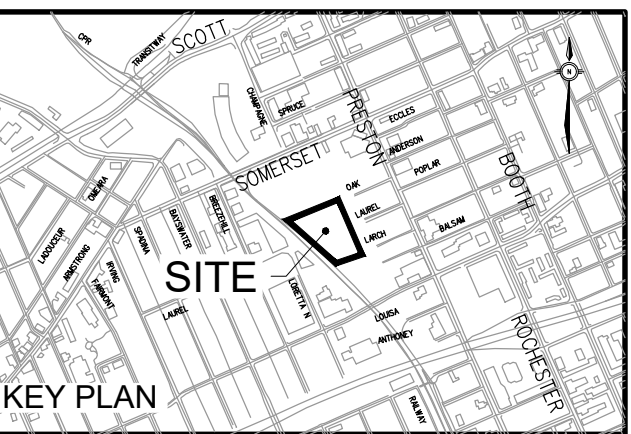
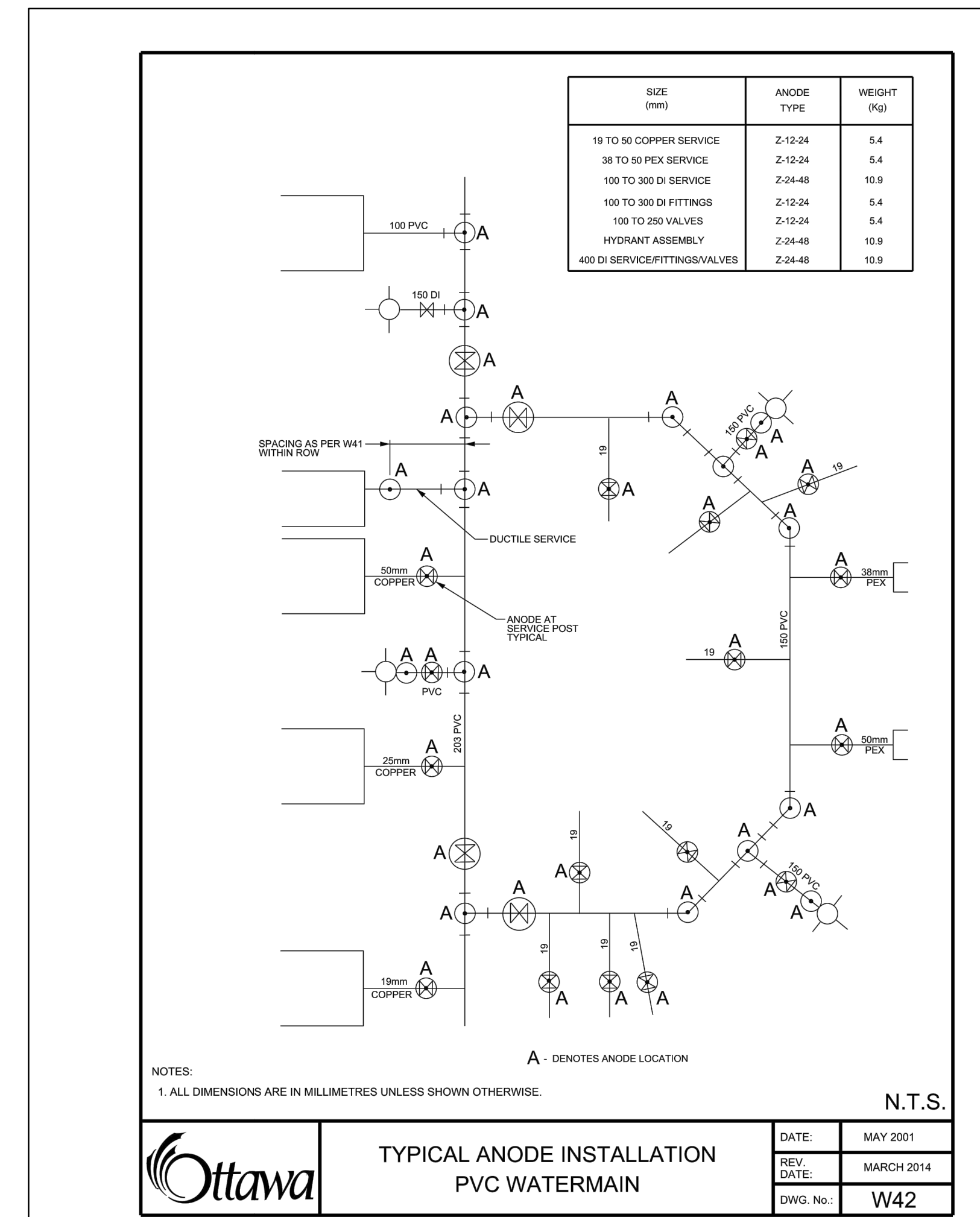
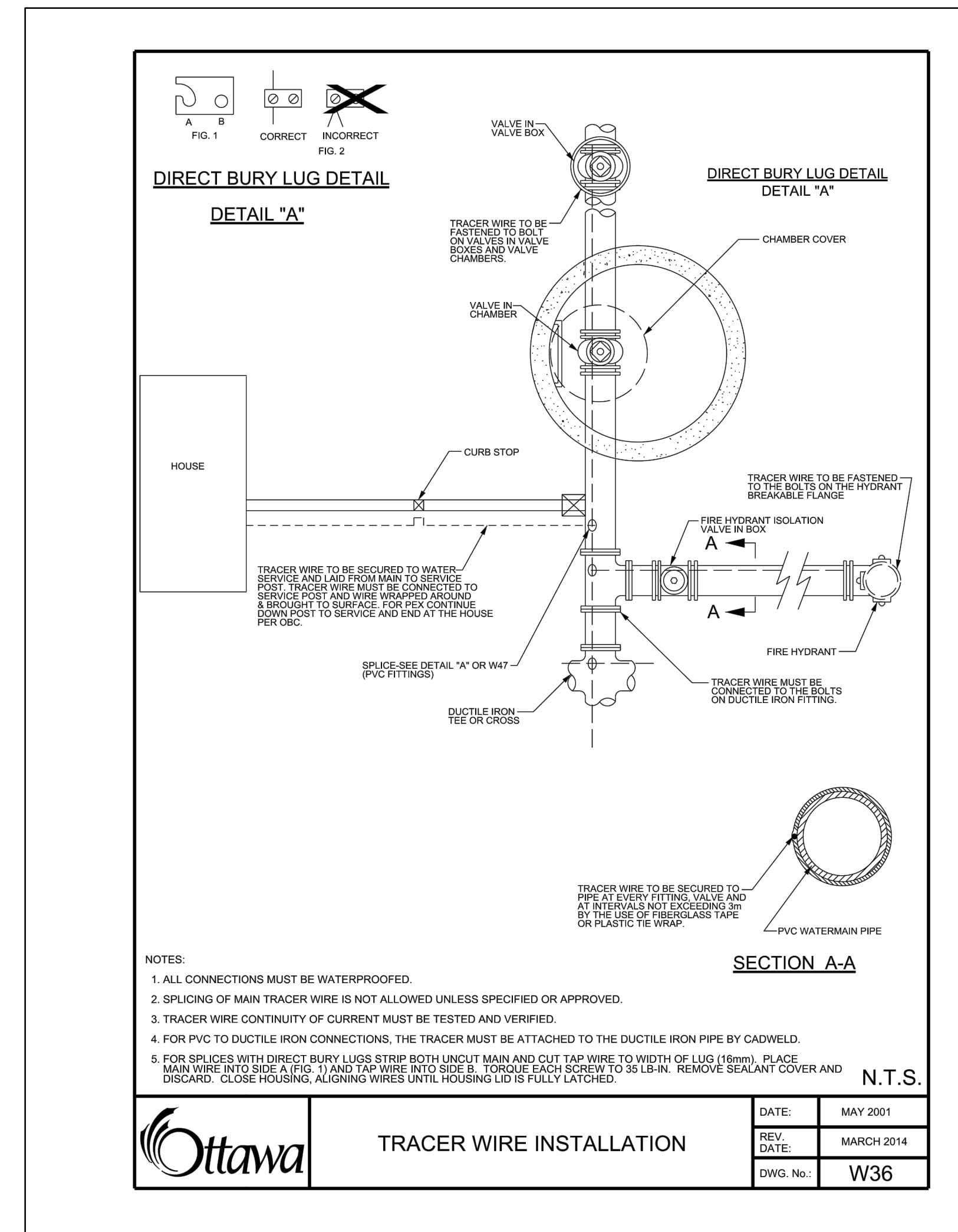
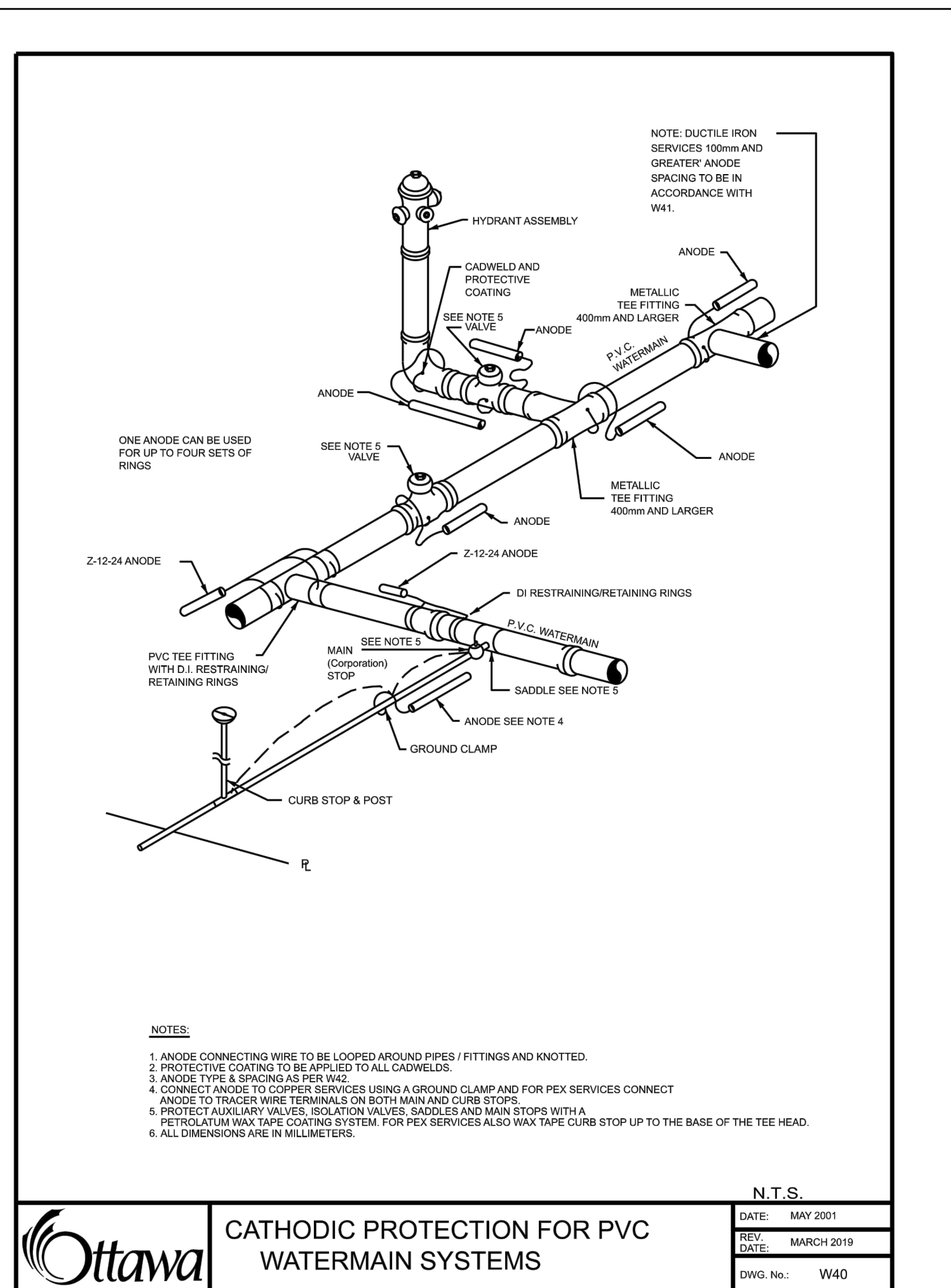
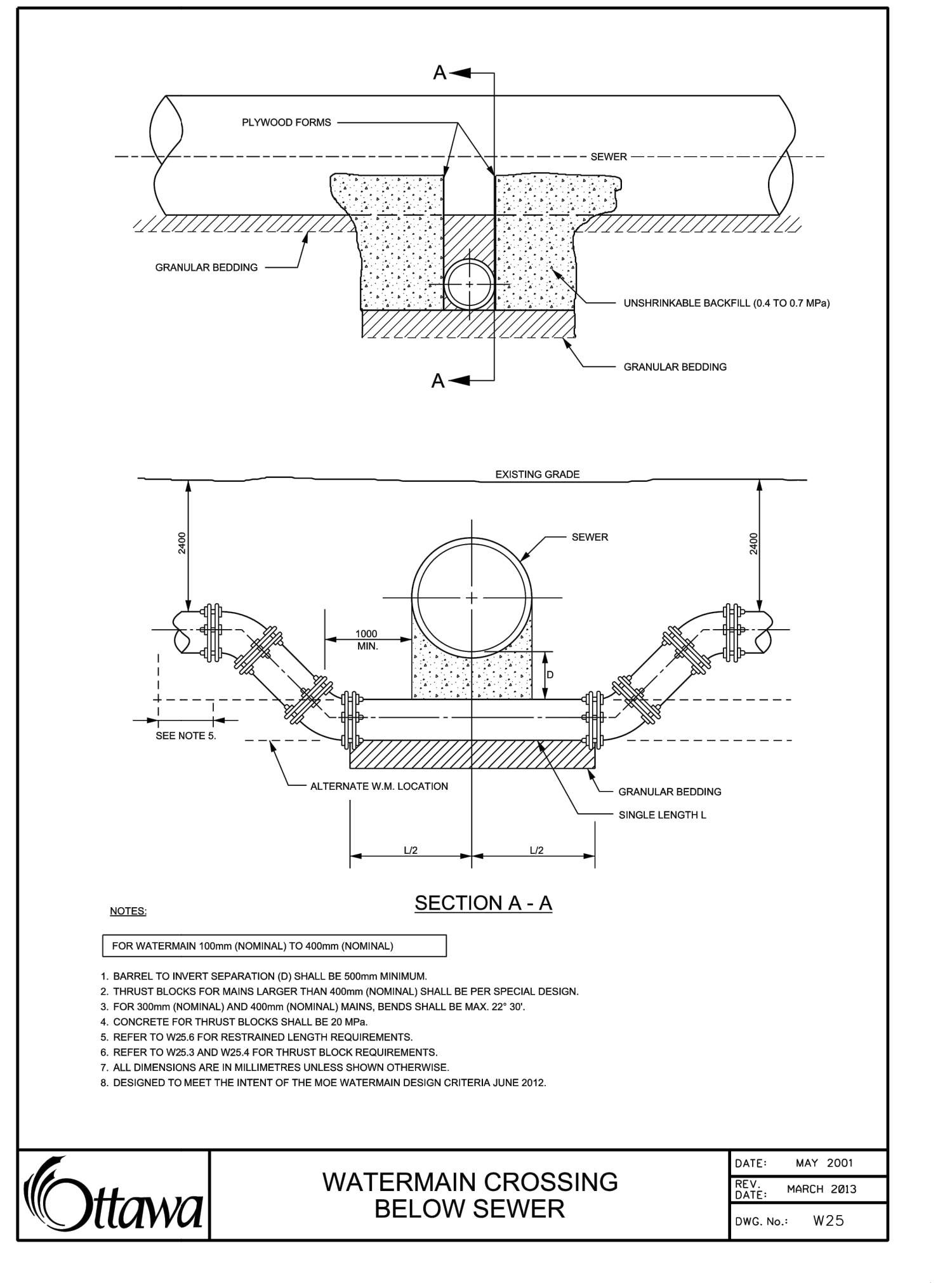
DETAILS 5

Scale: N/A
Project No: 210101900
Date: 08/09/21

C105

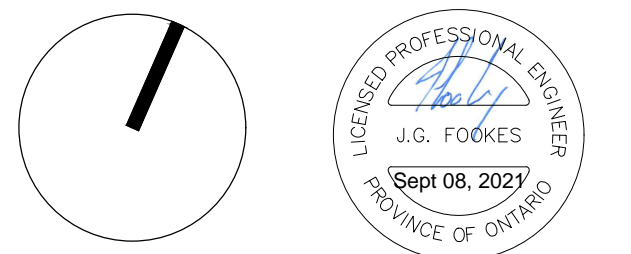
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No.	Date	Description
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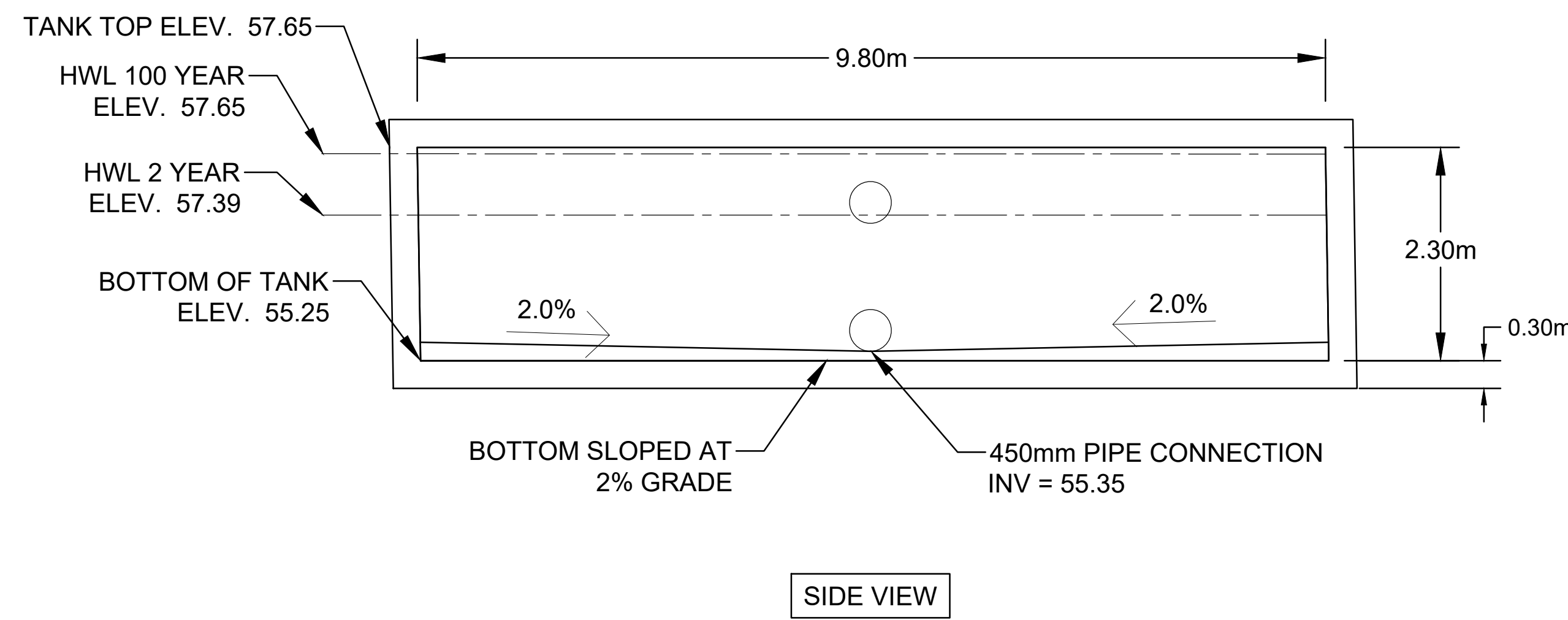
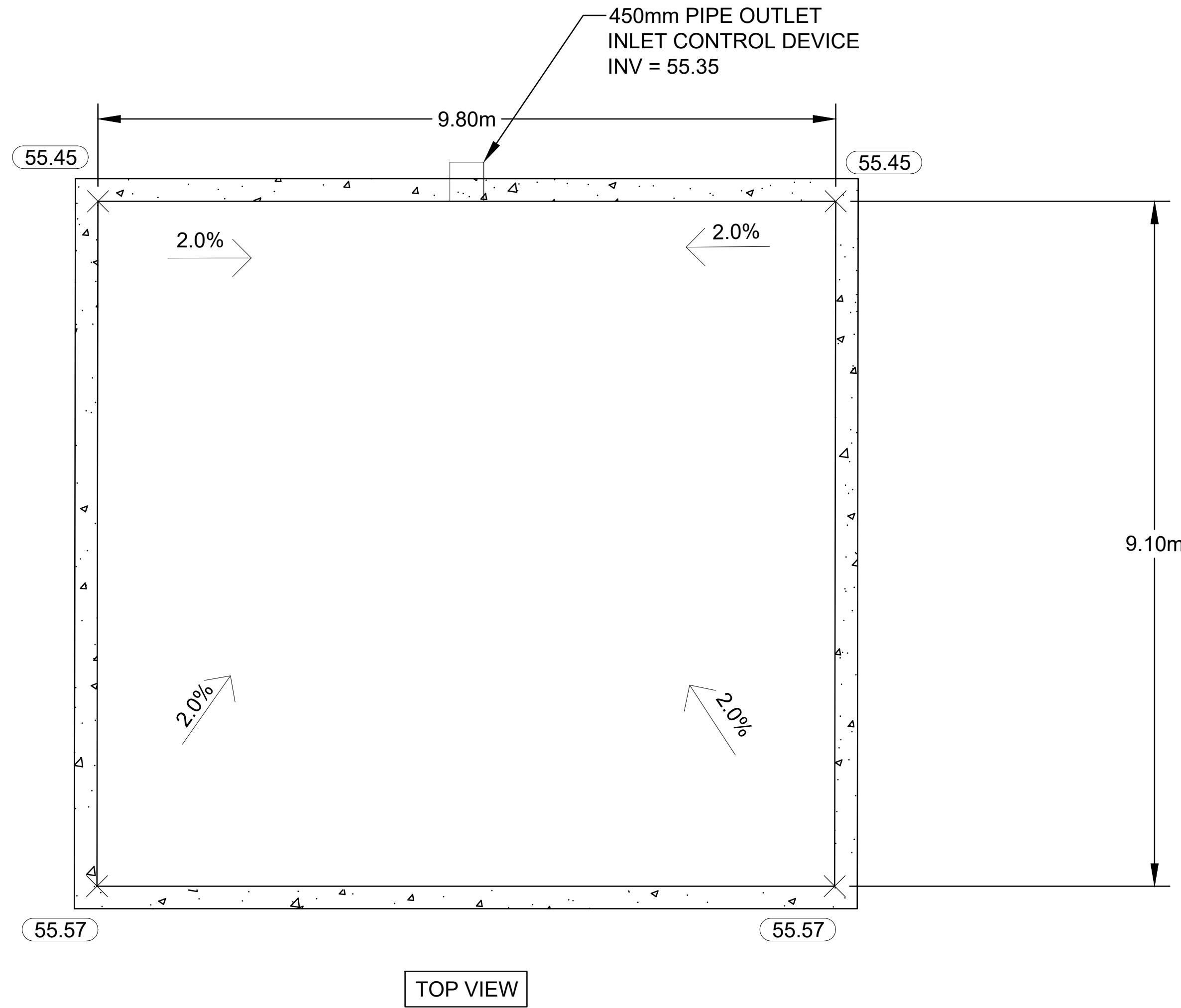
DETAILS 6

Scale: N/A
Project No: 210101900
Date: 08/09/21

C106

DETAILS OF STORMWATER DETENTION TANK

REINFORCED CONCRETE
STORMWATER DETENTION TANK
GROSS VOLUME = 180m³
OVERALL HEIGHT = 2.3m
TANK BOTTOM INV = 55.25
TANK TOP ELEV. = 57.65

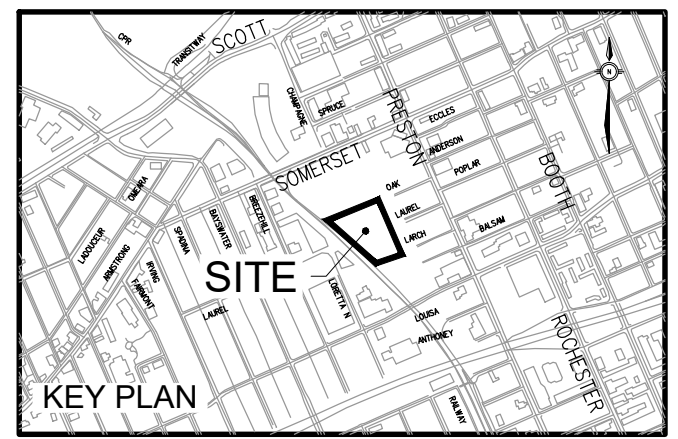
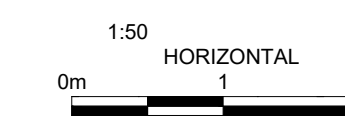


- NOTES:
- REFER TO STRUCTURAL FOR CONCRETE AND REINFORCING DESIGN
 - REFER TO IDC TABLE BELOW FOR ALL CONTROLLED FLOW REQUIREMENTS

LEGEND

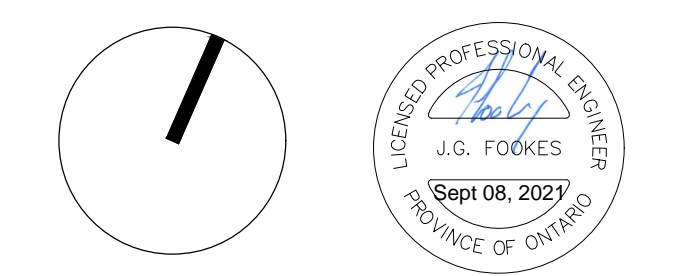
- PIPE OUTLET
- 59.46 PROPOSED ELEVATION
- 2.0% PROPOSED SLOPE DIRECTION
- CONCRETE WALL

DESIGN EVENT	ICD TYPE	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	WATER ELEVATION (m)	REQUIRED VOLUME (m ³)	TOTAL VOLUME PROVIDED (m ³)
1:2 YR	HYDROVEX 100VHV-1	450mmØ CONC.	10.9	57.39	136.8	180
1:100 YR	HYDROVEX 100VHV-1	450mmØ CONC.	11.7	57.65	173.6	180



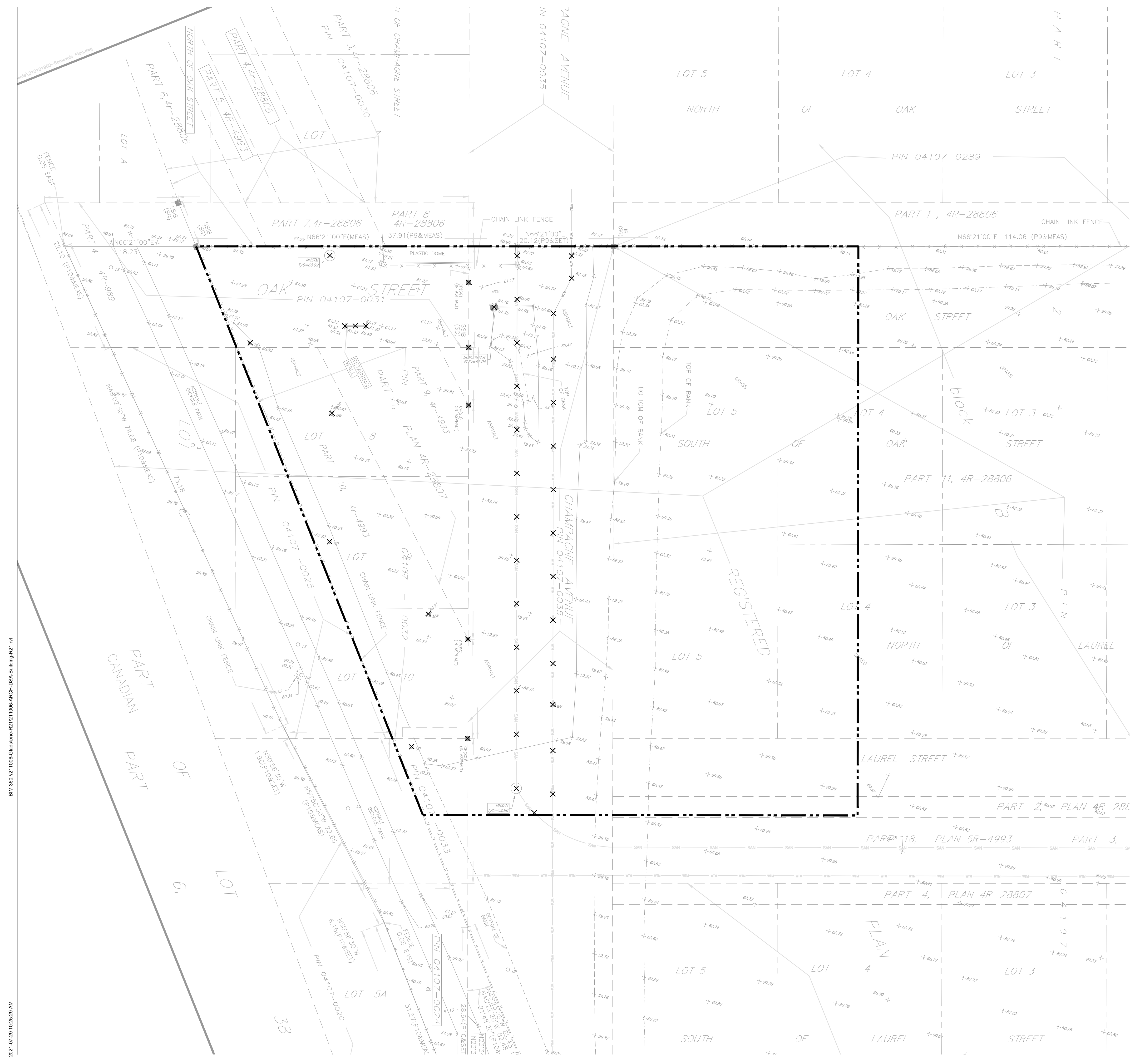
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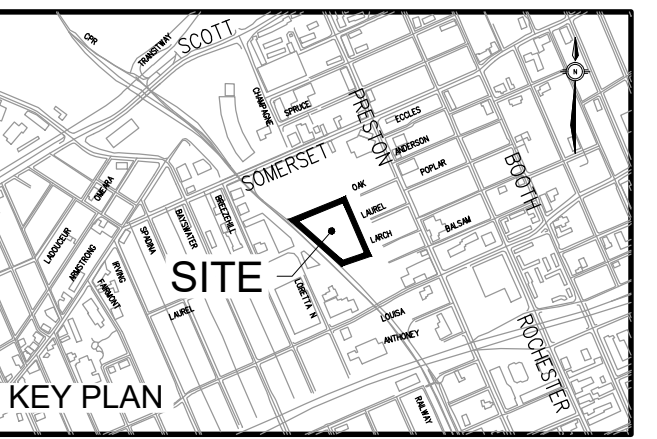


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REMOVALS
 1. COMPLETE ALL REMOVALS IN ACCORDANCE WITH OPSS MUN. 510

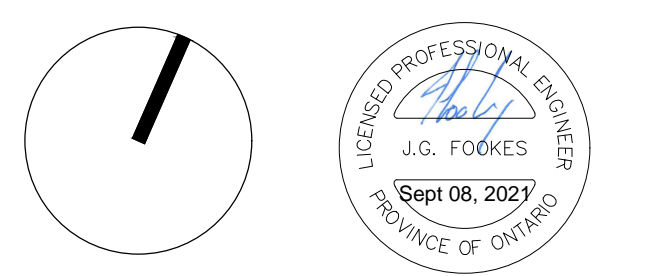


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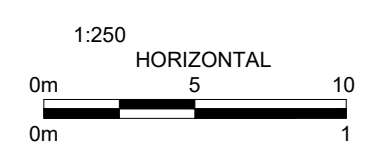
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LEGEND

- BOUNDS OF THE PROPERTY
- ✕ ✕ ✕ EXISTING WATERMAIN OR SEWER, VALVE CHAMBER, MAINTENANCE HOLE OR CATCH BASIN TO BE REMOVED OR ABANDONED (REMOVE IF WITH EXCAVATION LIMITS).

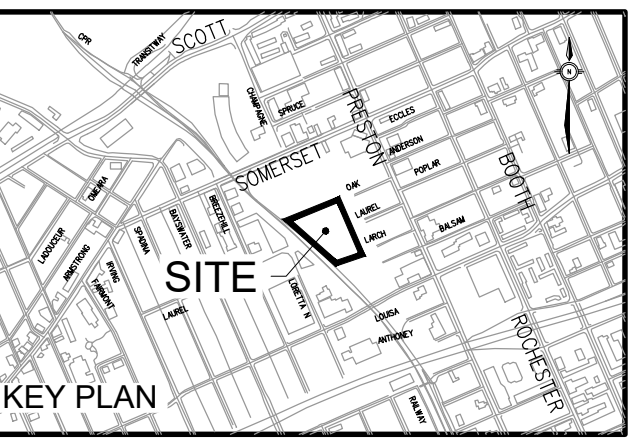


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 Project No: 210101900
 Date: 08/09/21

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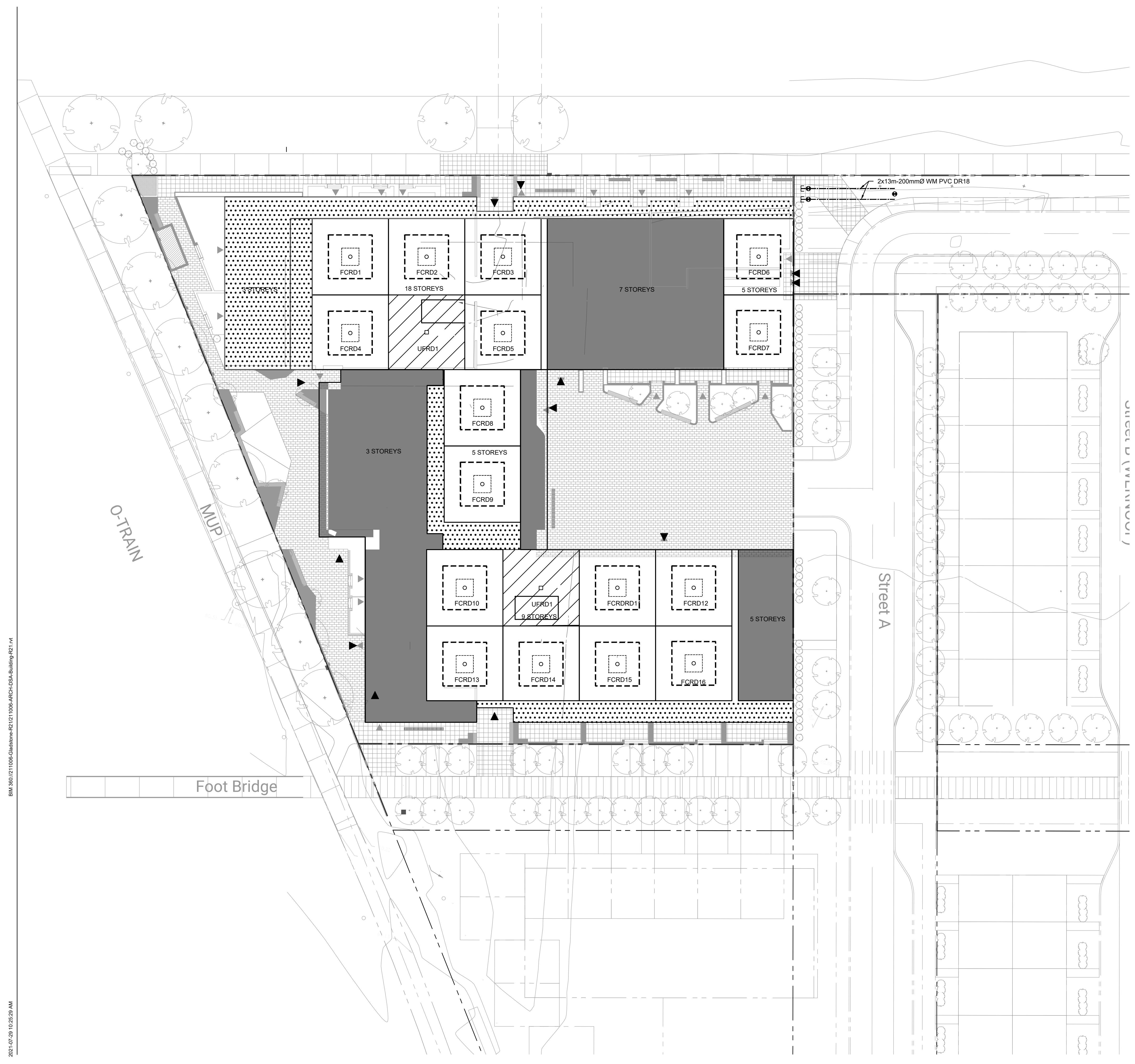
REMOVALS PLAN

C700



ISSUED

No.	Date	Description
1	2021 SEP 08	ISSUED FOR SITE PLAN APPROVAL



- LEGEND**
- FLOW CONTROLLED ROOF DRAIN
 - UNCONTROLLED FLOW ROOF DRAIN
 - AMENITY ROOF/OCCUPIABLE - NO FLOW CONTROL
 - UNOCCUPIABLE ROOF - NO FLOW CONTROL
 - AREA WITH UNCONTROLLED FLOW
 - 2 YR=34MM DEPTH
 - 100 YR=86MM DEPTH



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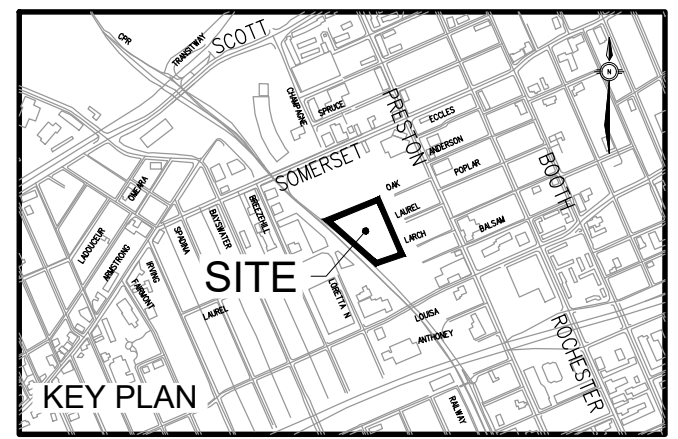
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Scale: 1:250
Project No: 210101900
Date: 08/09/21

ROOF DRAIN LAYOUT &
PONDING
C701

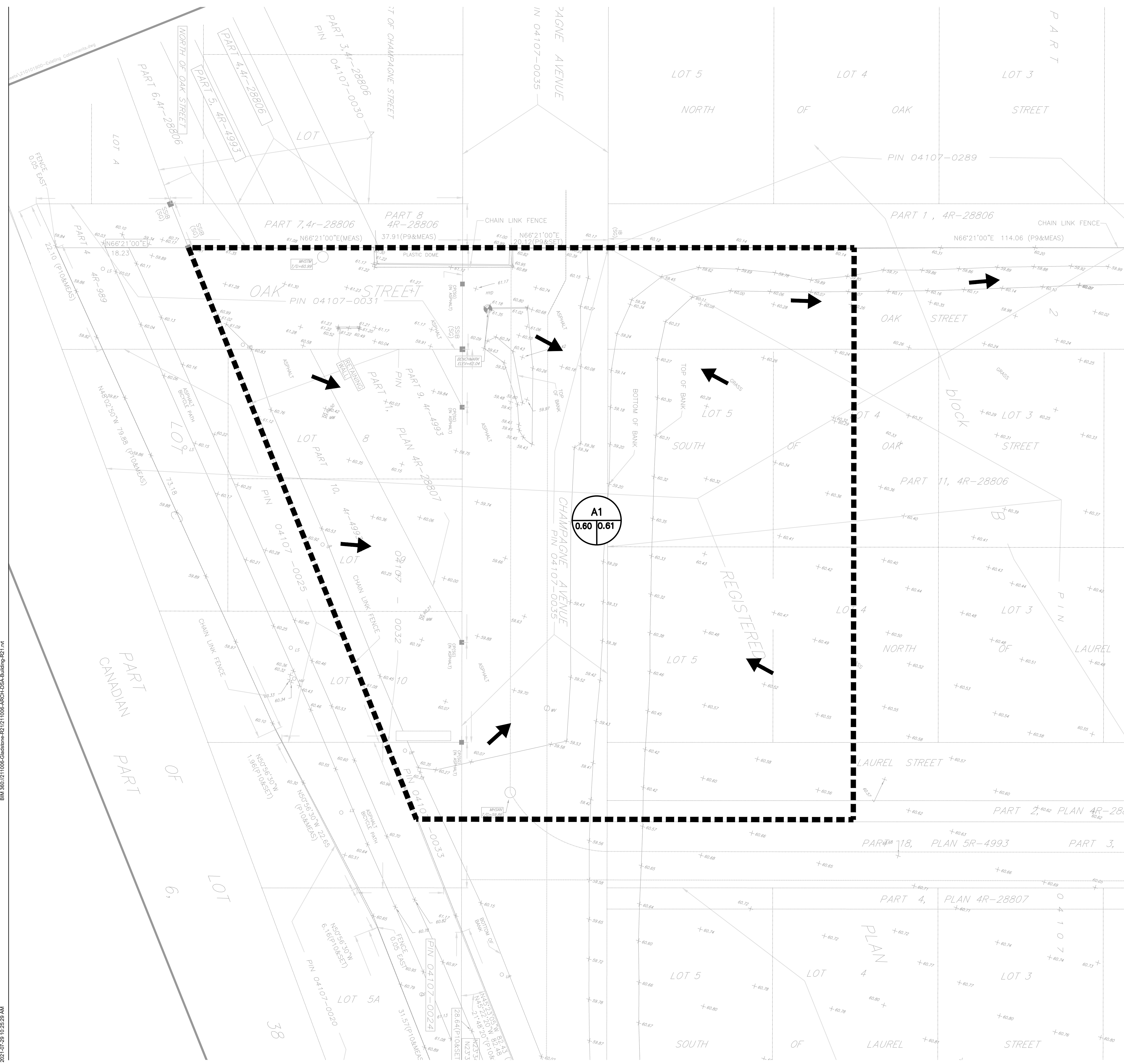
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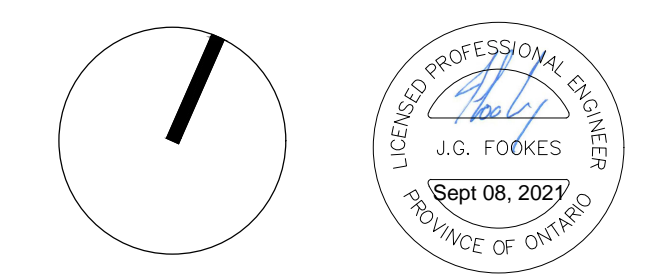
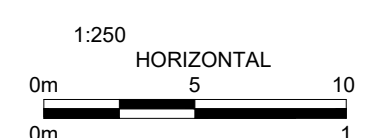
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No.	Date	Description
1	2021 SEP 08	ISSUED FOR SITE PLAN APPROVAL



LEGEND

- AREA ID** **DRAINAGE AREA CHARACTERISTICS**
- RUNOFF COEFFICIENT %** **AREA ha**
- CATCHMENT AREAS**
- OVERLAND FLOW DIRECTION**



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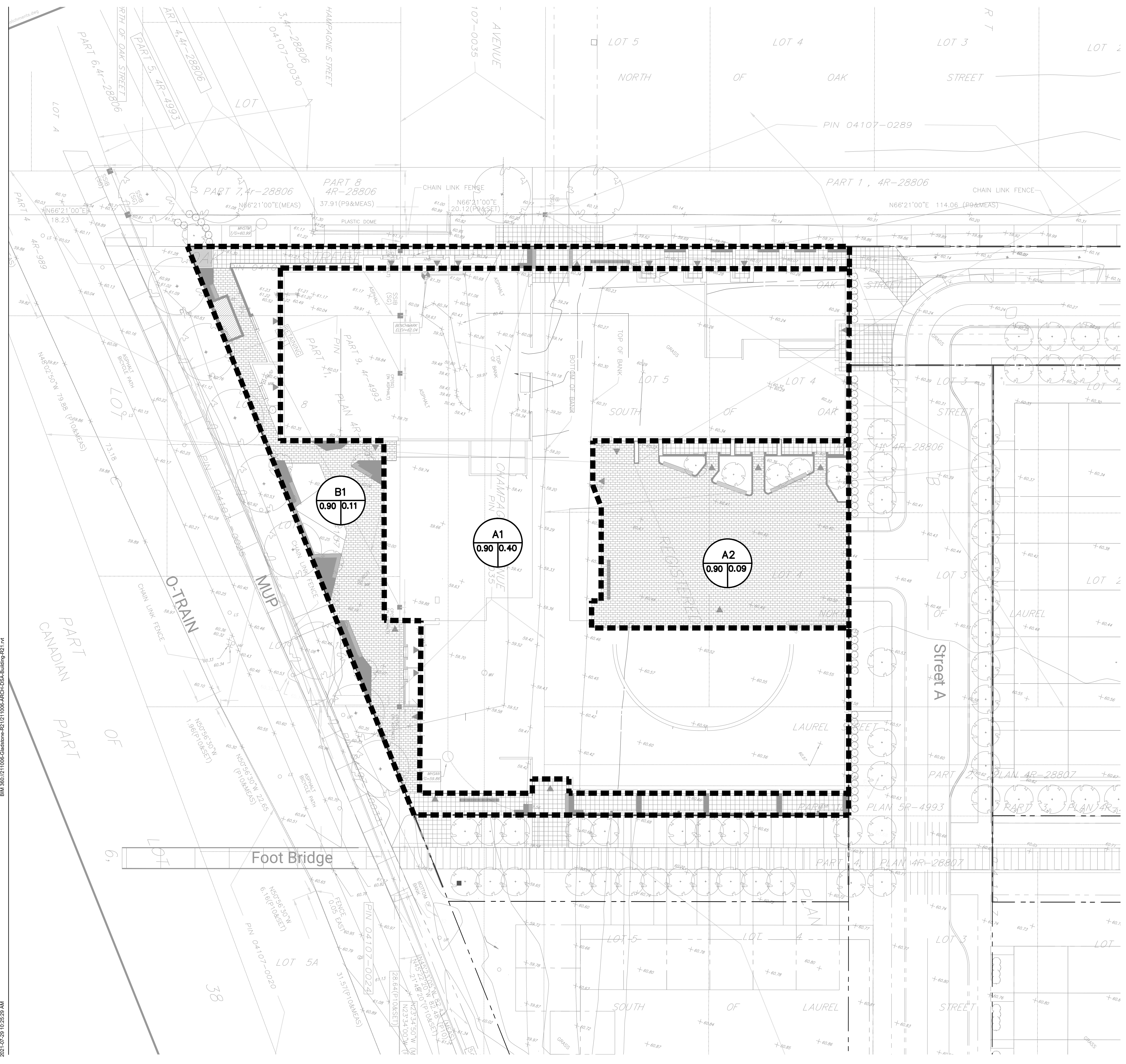
EXISTING SITE CATCHMENTS

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Project No: 210101900
Date: 08/09/21

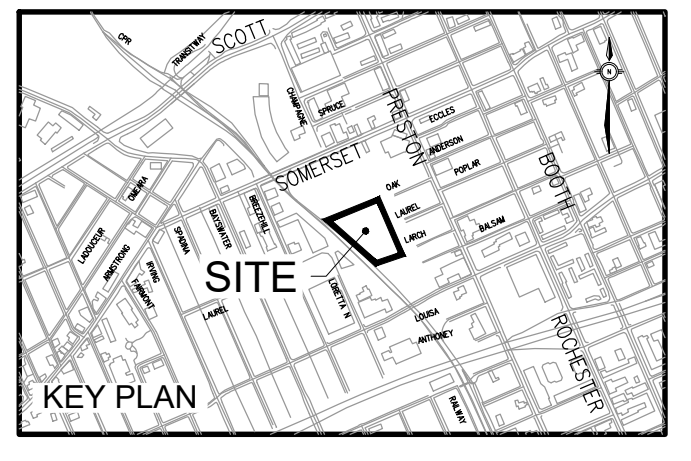
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NOTES
 1. A1 & A2 ARE PROPOSED CONTROLLED CATCHMENTS.
 B1 IS A PROPOSED UNCONTROLLED CATCHMENT.



ISSUED

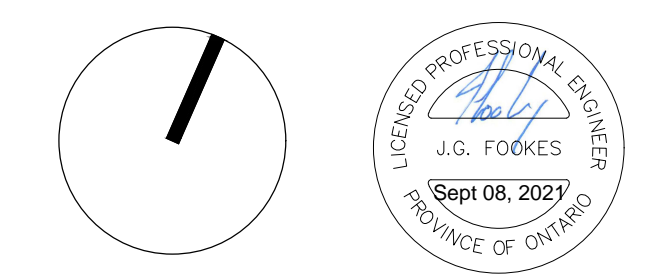
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LEGEND

- AREA ID** **DRAINAGE AREA CHARACTERISTICS**
- RUNOFF COEFFICIENT %** **AREA ha**
- CATCHMENT AREAS**

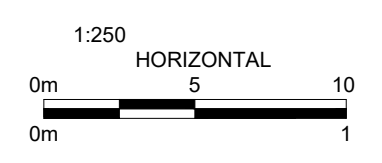


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PROPOSED SITE CATCHMENTS

C801



Scale: 1:250
 Project No: 210101900
 Date: 08/09/21